Contents

EXECUTIVE SUMMARY

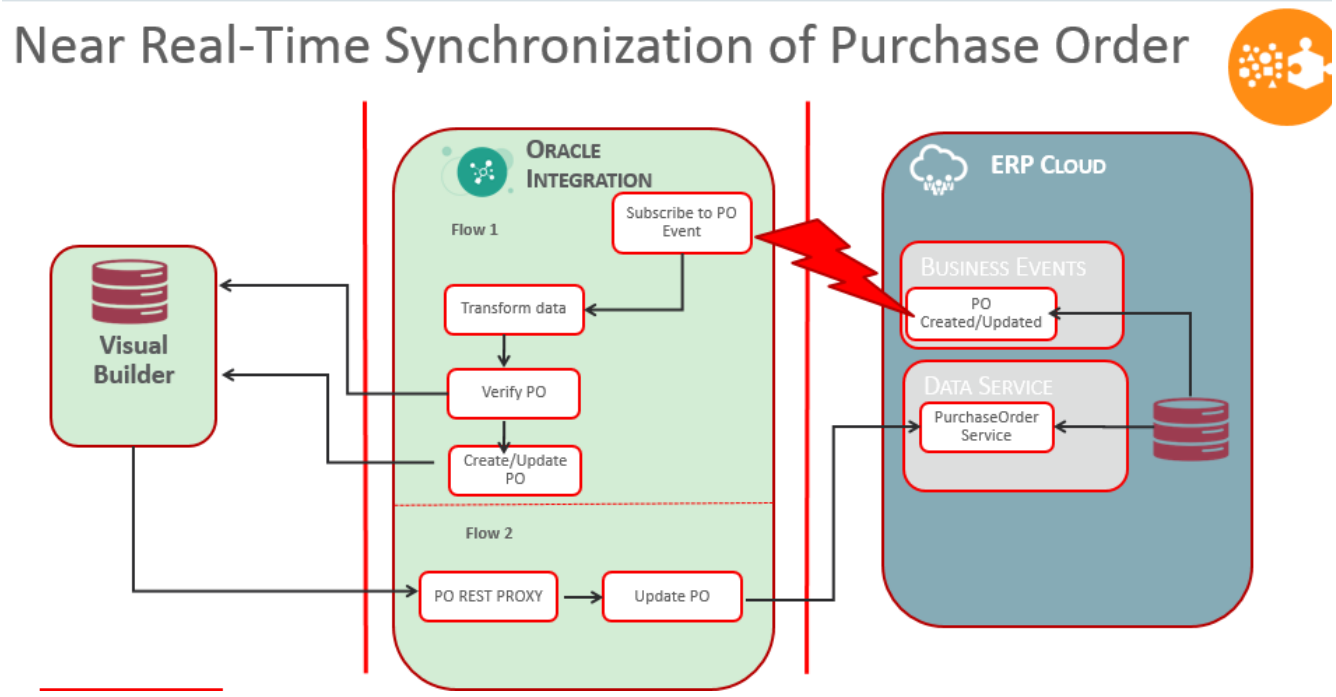
Oracle Integration provides native connectivity to Oracle and non-Oracle Software as a Service (SaaS) and On-premises applications, such as Oracle ERP Cloud, Oracle Service Cloud, HCM Cloud, Salesforce.com, Workday, EBS, SAP, NetSuite and so on. Oracle Integration adapters simplify connectivity by handling the underlying complexities of connecting to applications using industry-wide best practices. You only need to create a connection that provides minimal connectivity information for each system.

USECASE BACKGROUND

This use case explores the use of Oracle Integration to subscribe to Oracle ERP Cloud Events and push the relevant event information to downstream systems. As part of the lab you would be building the below use case scenario.

a. User creates a Purchase Order(PO) in ERP Cloud and a PO event is raised (Flow1)
b. Oracle Integration subscribes to the PO event, transforms and pushes the relevant information to a custom table (VBCS) (Flow1)
c. User attaches Letter of Credit (LOC) information to the PO record from the VBCS Web App. (Flow2)
d. PO Record in ERP Cloud is updated with the LOC information in ERP cloud (Flow2)

The following diagram illustrates the proposed interaction between the systems involved in this use case. There 2 flows to complete this use case.



OBJECTIVE

This document walks you through the steps needed to replicate this use case in your environment

BUILDING THE ERP CLOUD PO EVENT USE CASE

This section works through the steps that are required to build the integration from scratch.

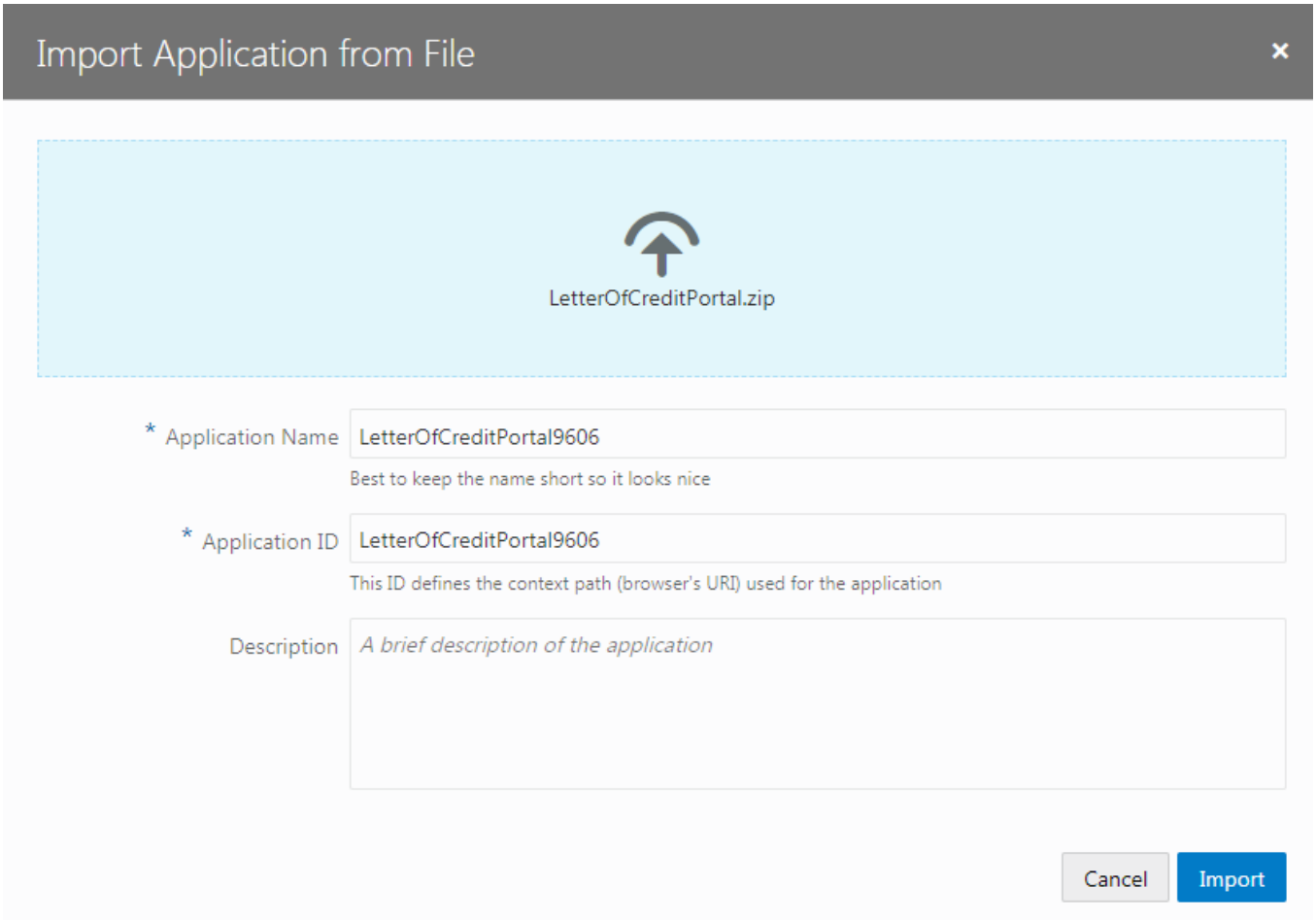
Prerequisites

You will need access to the following applications and artifacts:

- Oracle Integration (OIC)
- ERP Cloud R12+
- VBCS App to import (LetterOfCreditPortal.zip)

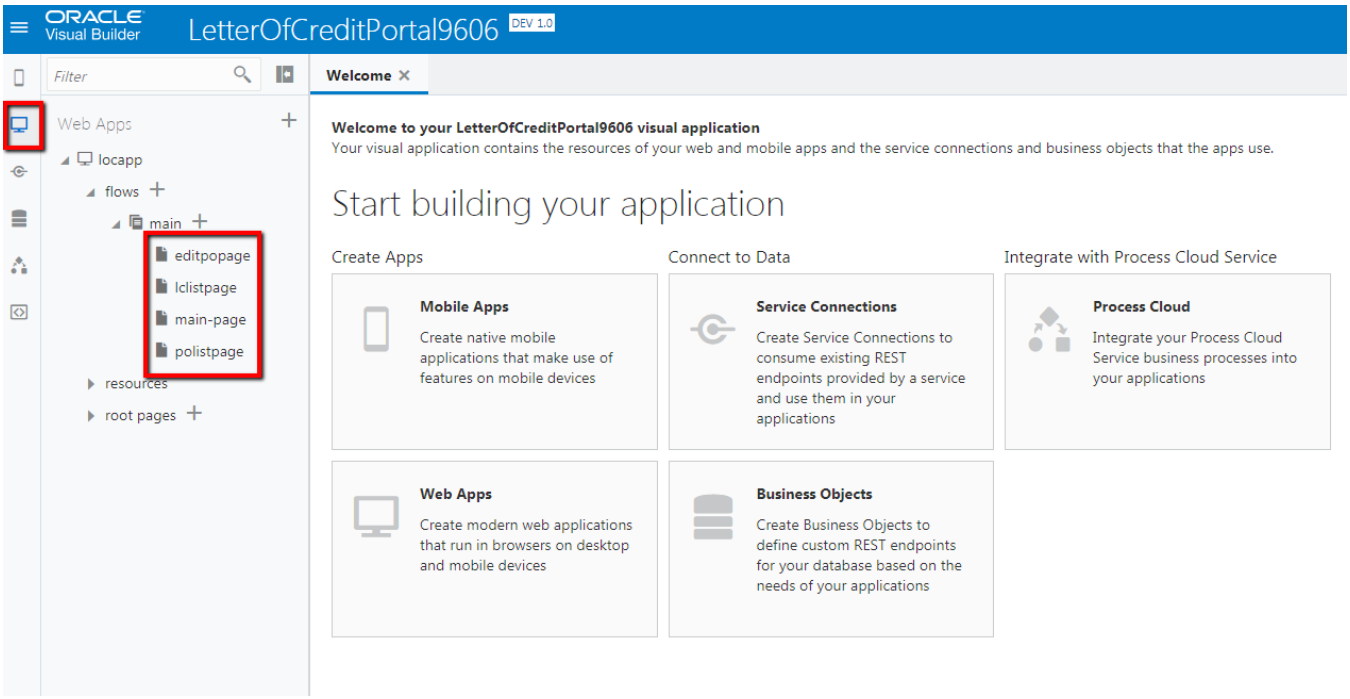
Import VBCS Web Application

1. Login to Oracle Integration homepage and Click on Visual Builder
2. Select Import -> Application from file and Upload the "LetterOfCreditPortal.zip" from the Lab artifacts
   Note: Since there are multiple attendees sharing a single environment, please use the <ClassID> <StudentID> information (will be provided to you by the instructor) as a suffix to your web application
   E.g. If your <ClassID> is 96 and your <StudentID> is 06, then you will name your web application as **LetterOfCreditPortal9606**
3. Change the ApplicationId also to the same name (**LetterOfCreditPortal9606)** to avoid conflicts and Select **Import**

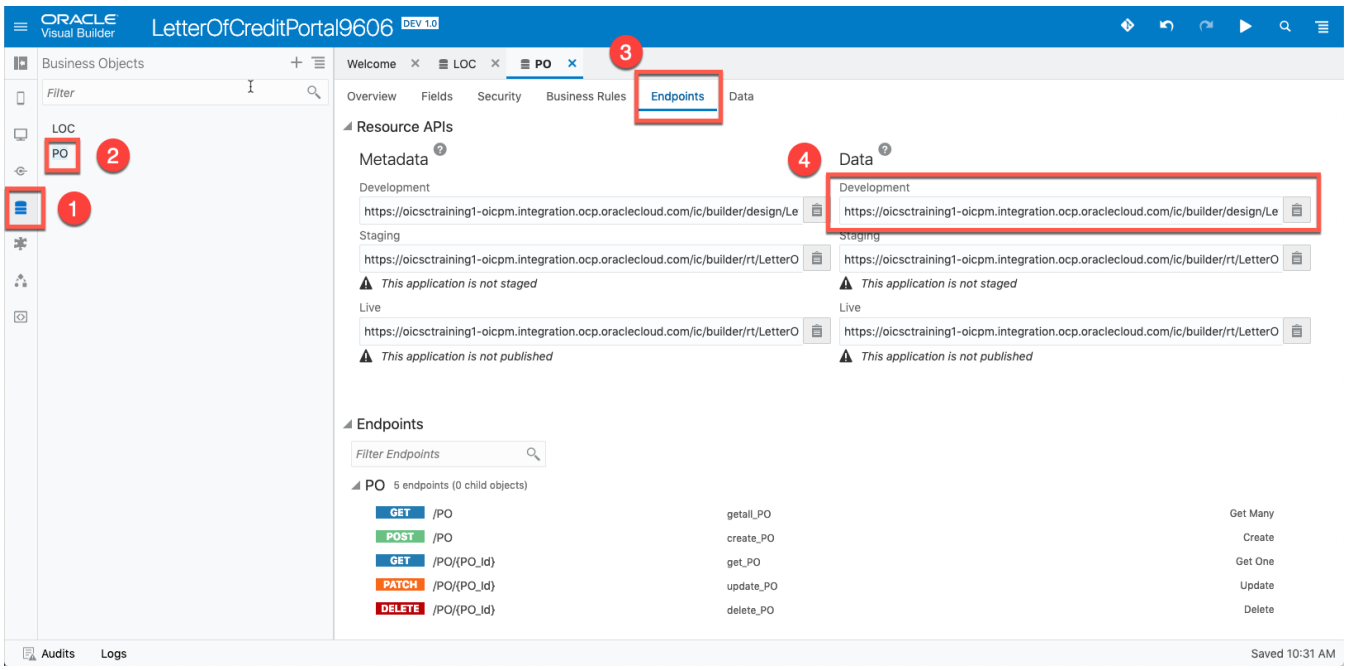


4. Confirm that your application is imported into VBCS. Open the Imported application and you would notice that a few pages and business objects relevant to the use case is pre created. We will use this web application in the later part of the lab.

Select the imported Web Application and you will observe a few pages are pre created



5. Couple of Business Objects (PO and LOC) pre created



Click the PO Business Object, copy the Data endpoint as highlighted above, and save it for later use.

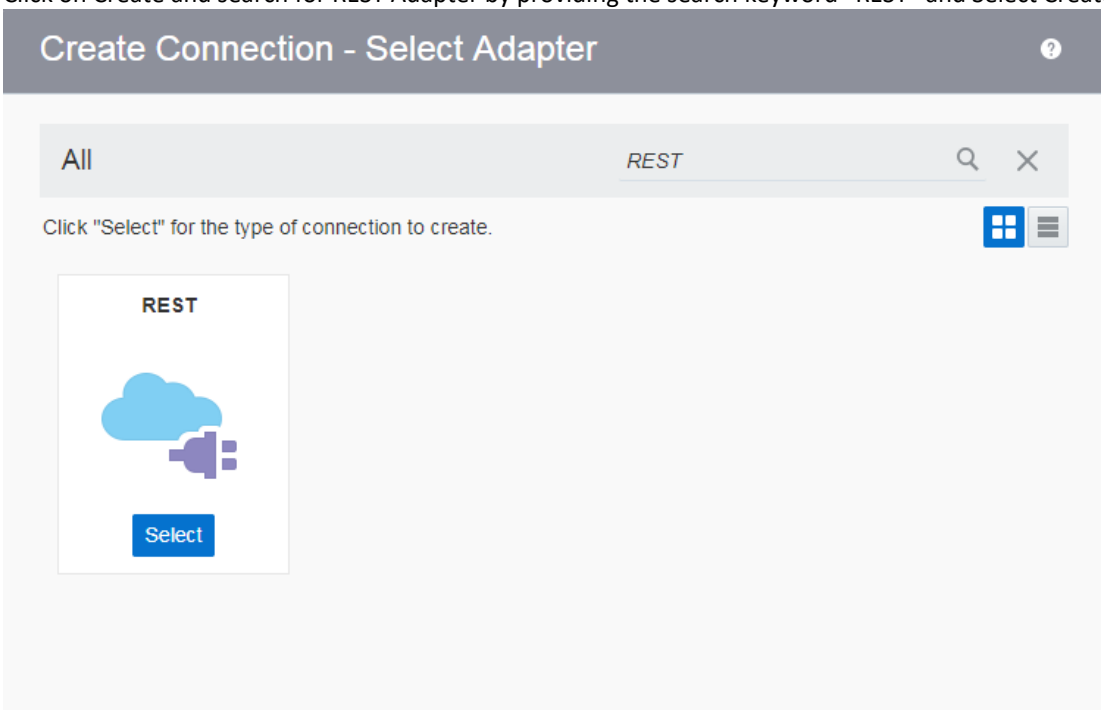
Creating Connections (Flow1)

The following Connections have been created and configured. You will be using these connections for creating Integration flows

Connection Name	Connection Type
ERP Conn 96 06	ERP Adapter

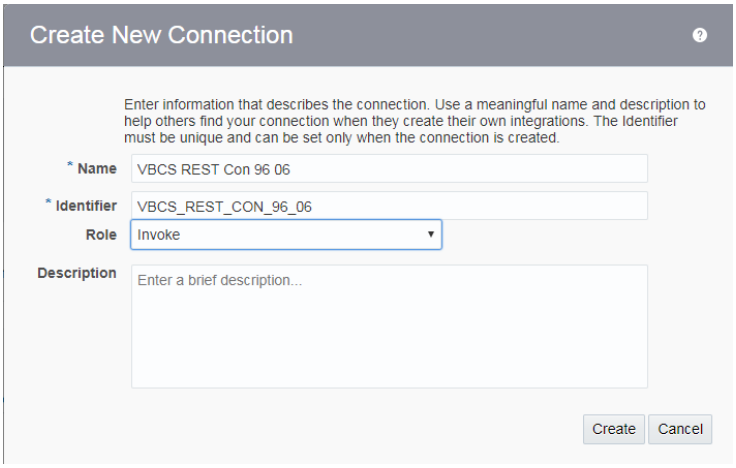
Creating REST Connection

1. On the Oracle Integration home page, click Integrations
2. Select the Connections tab
3. Click on Create and search for REST Adapter by providing the search keyword “REST” and Select Create



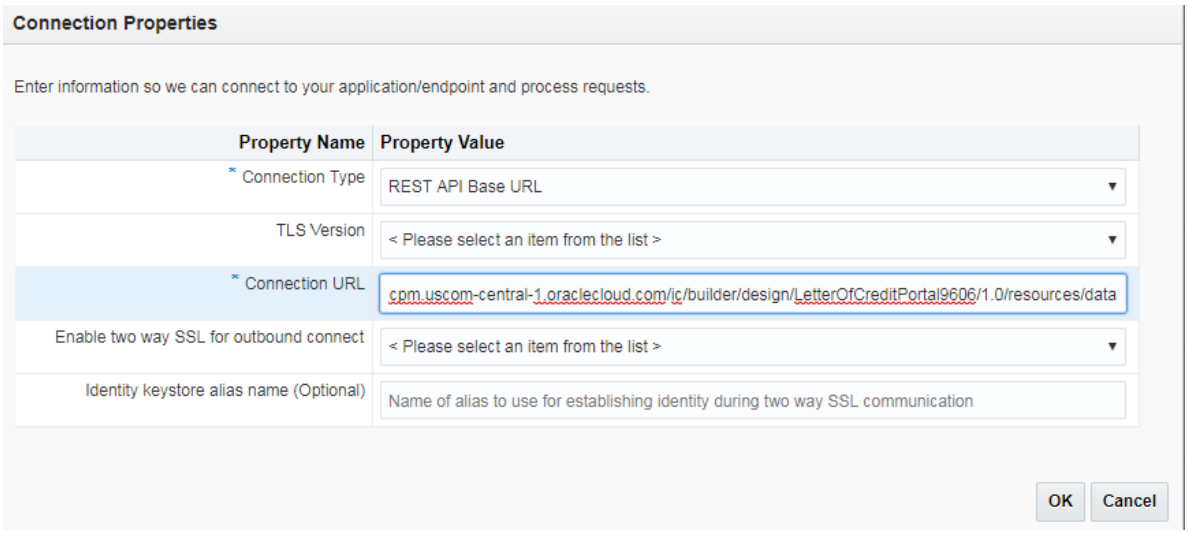
4. Provide following details and click on Create

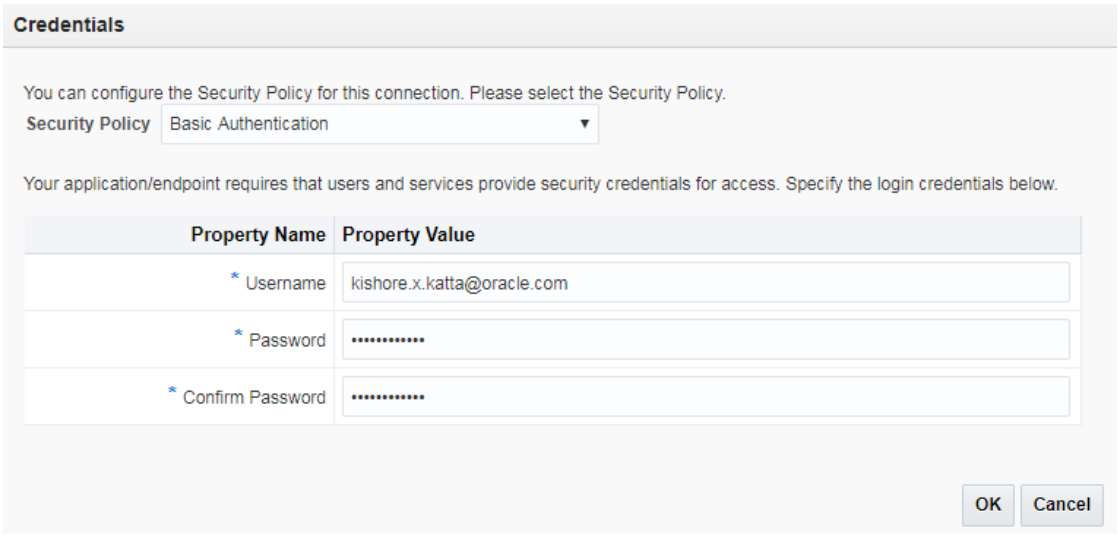
Field	Enter
Name	VBCS REST Con <ClassId><StudentId> Eg: VBCS REST Con 96 06
Identifier	Nothing to enter. The value is automatically generated from the integration name: VBCS_REST_CON_<ClassId>_<StudentId> Eg: VBCS_REST_CON_96_06
Role	Invoke



5. Configure Connectivity and Security Property Values as per below table and Click “OK”

Field	**Enter**
Configure Connectivity	
Connection type	REST API Base URL
Connection URL	Use the Data endpoint url copied from “Import VBCS App” Section” -> Step 5 Provide the endpoint till “/data “ Ex: https://<oichost>/ic/builder/design/LetterOfCreditPortal9606/1.0/resources/data
Configure Security	
Security Policy	Basic Authentication
Username	Use the same credentials as used for login into Oracle Integration console
Password	Use the same credentials as used for login into Oracle Integration console



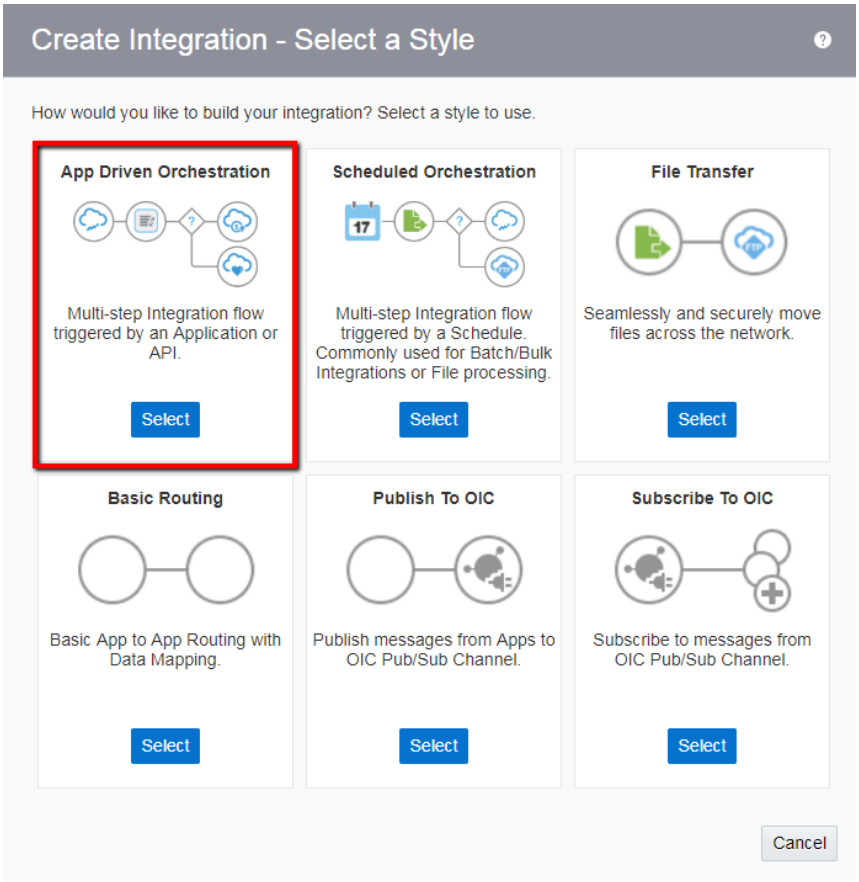


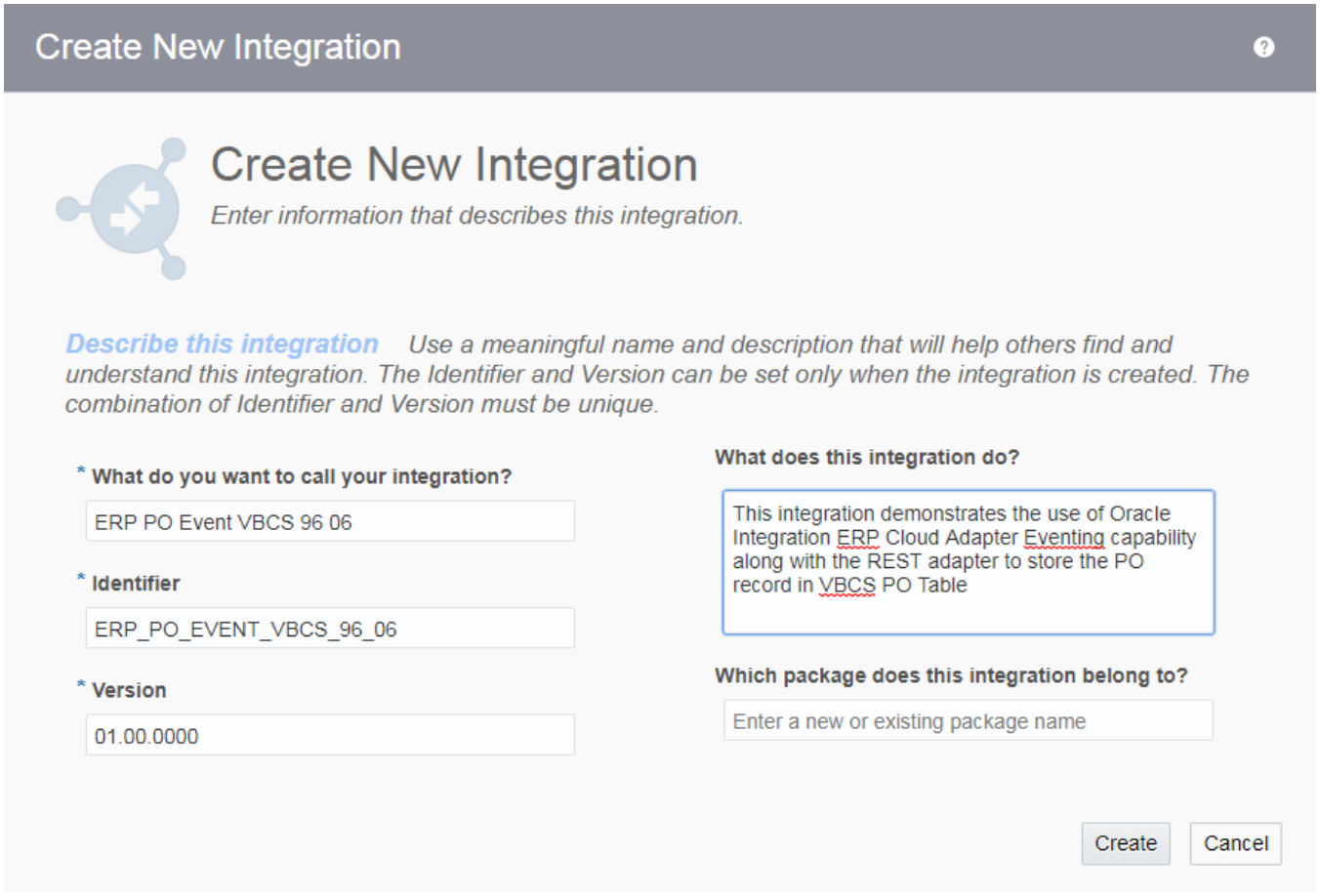
Save and Test the connection

Creating the PO Event Integration (Flow1)

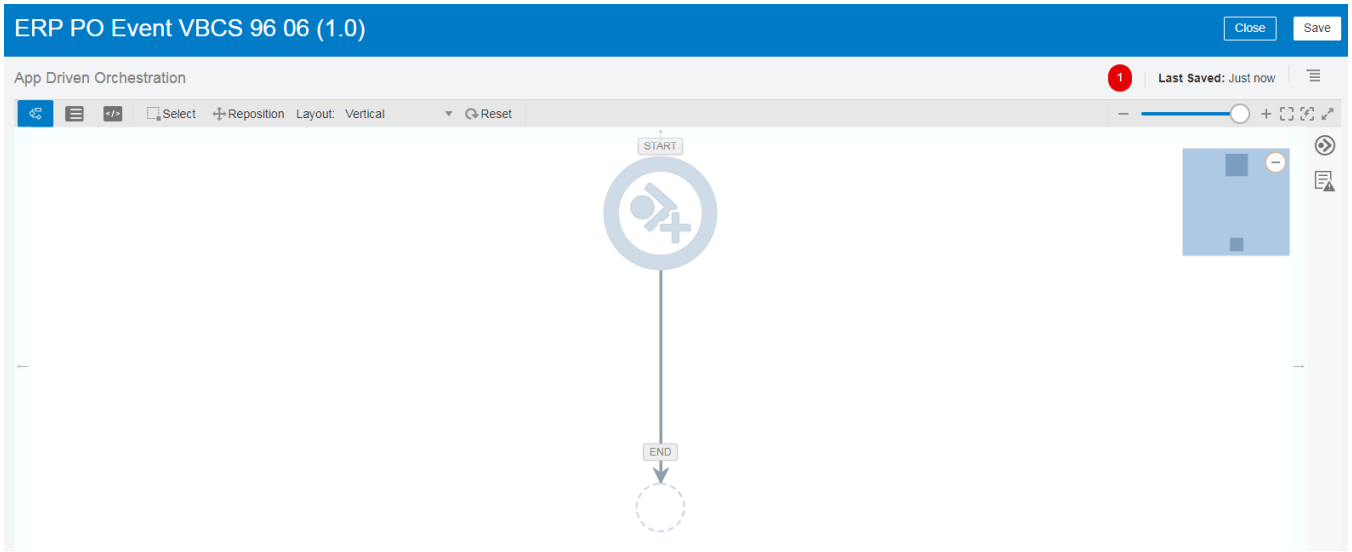
1. On the Oracle Integration home page, click **Integrations**.
2. On the Integrations page, click **Create**. The Create Integration - Select a Style/Pattern dialog is displayed.
3. Select **App Driven Orchestration** type of integration. The **Create New** Integration dialog is displayed.
4. Enter the following information:

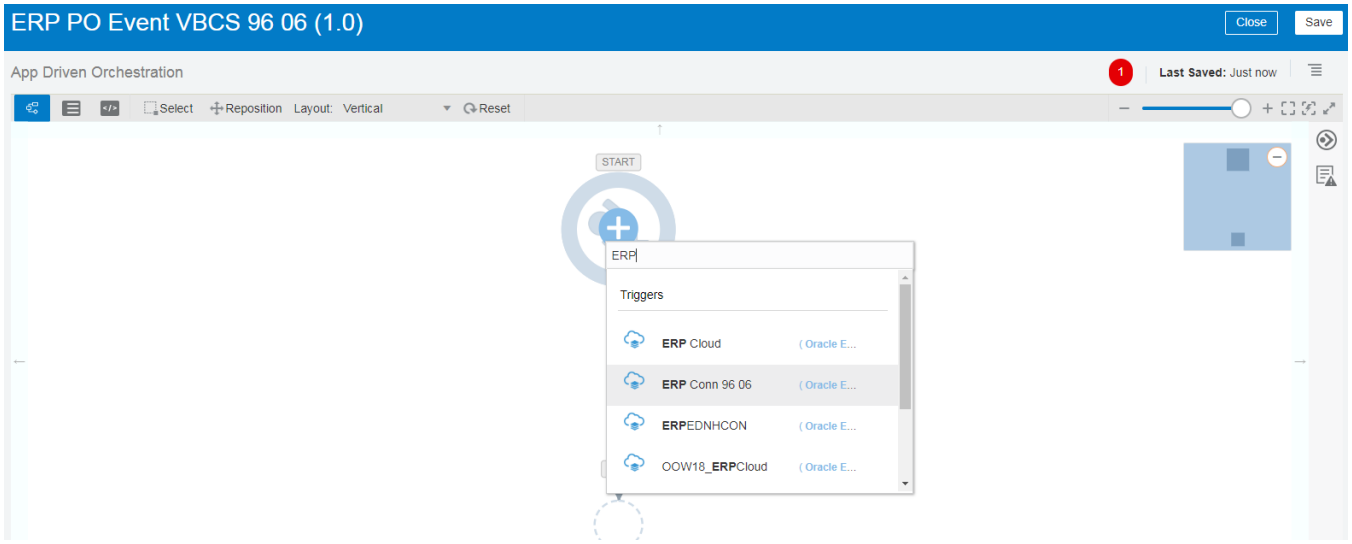
Field Element	Value
What do you want to call your integration?	ERP PO Event VBCS <ClassId> <StudentId> Ex: ERP PO Event VBCS 96 06
Identifier	Accept the default identifier value. The identifier is the same as the integration name you provided, but in upper case.
Version	Accept the default version number of `01.00.0000`. Alternatively, if you want to change the version number, enter the version using numbers only in this format: `xx.xx.xxxx`.
What does this integration do?	This integration demonstrates the use of Oracle Integration ERP Cloud Adapter Eventing capability along with the REST adapter to store the PO record in VBCS PO Table
Which package does this integration belong to?	*Leave blank*


Create Integration - Select a Style
How would you like to build your integration? Select a style to use.
App Driven Orchestration
Multi-step Integration flow triggered by an Application or API.
Select
Scheduled Orchestration
Multi-step Integration flow triggered by a Schedule. Commonly used for Batch/Bulk Integrations or File processing.
Select
File Transfer
Seamlessly and securely move files across the network.
Select
Basic Routing
Basic App to App Routing with Data Mapping.
Select
Publish To OIC
Publish messages from Apps to OIC Pub/Sub Channel.
Select
Subscribe To OIC
Subscribe to messages from OIC Pub/Sub Channel.
Select
Cancel

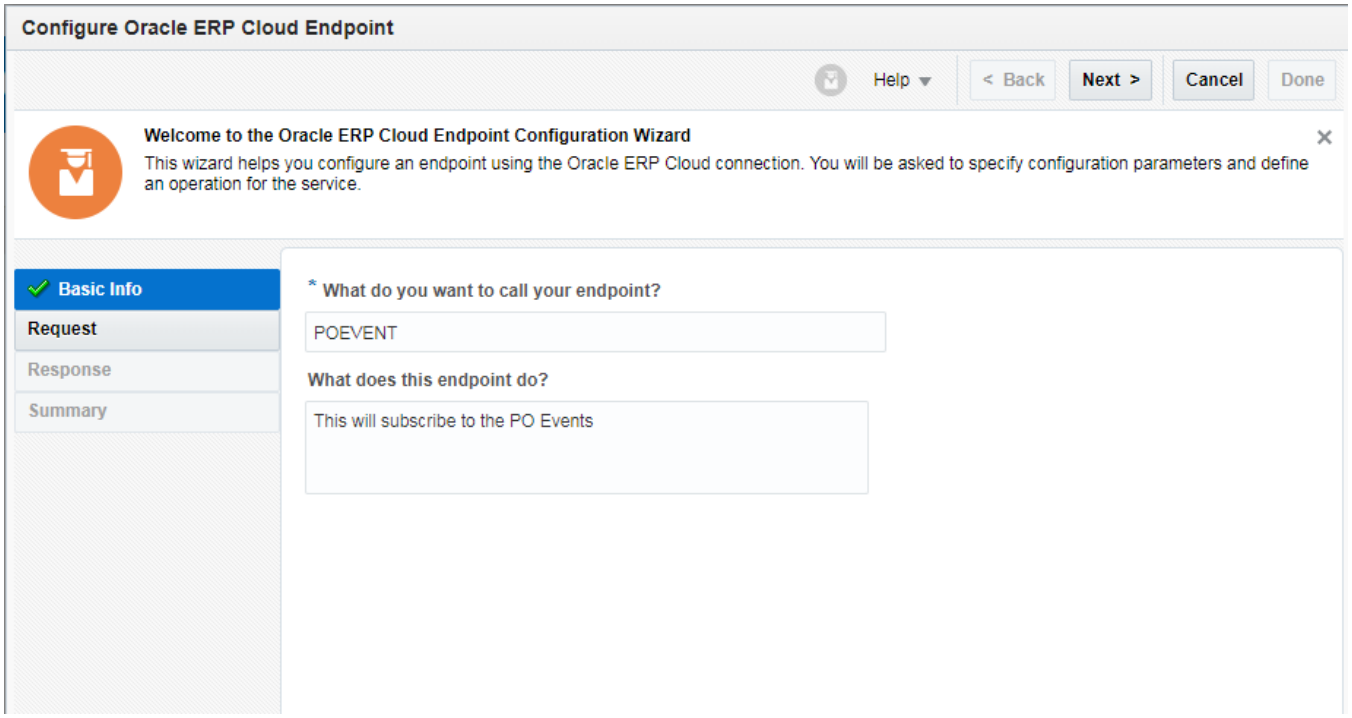


5. Click **Create**. The integration canvas is displayed.





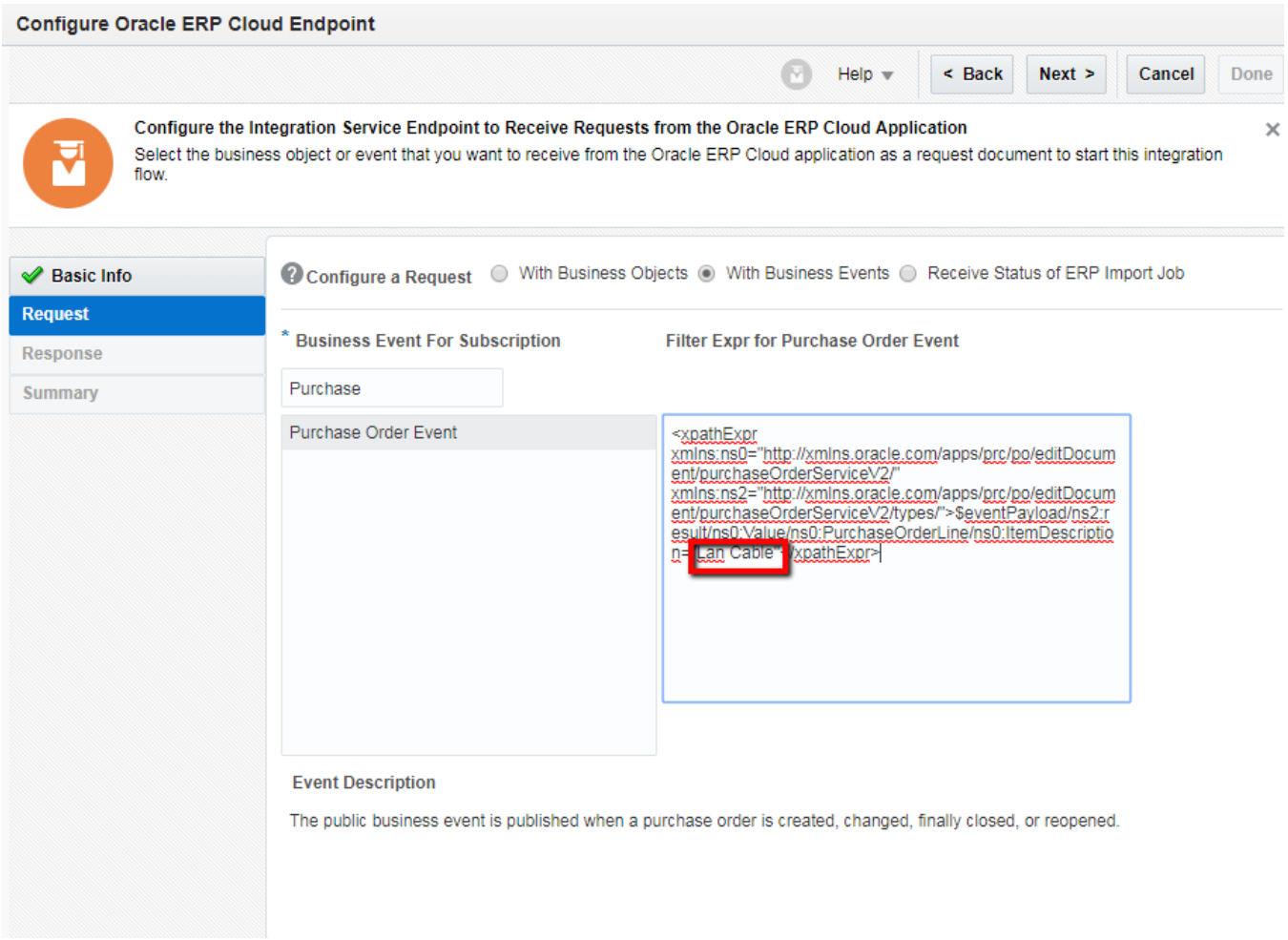
6. Hover over the circle next to Start, and click on the + sign
7. Select the ERP Connection (ERP conn 96 06) from the list which is pre created for you
8. Enter details as in the screenshot below to define the endpoint in the flow



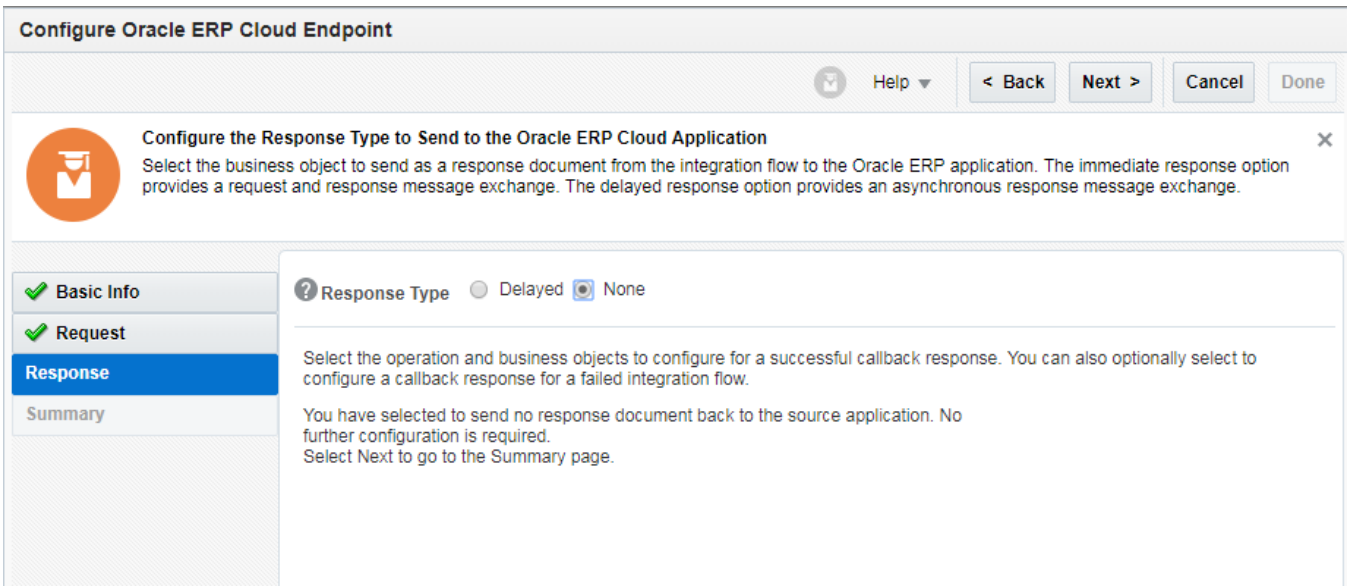
9. In the next screen, select “Receive Business Events raised within ERP Cloud” as the option and search for the “Purchase Order Event” and provide an XPath Expression as below and Click Next

```
<xpathExpr xmlns:ns0="http://xmlns.oracle.com/apps/prc/po/editDocument/purchaseOrderServiceV2/" xmlns:ns2="http://xmlns.oracle.com/apps/prc/po/editDocument/purchaseOrderServiceV2/types/">$eventPayload/ns2:result/ns0:Value/ns0:PurchaseOrderLine/ns0:ItemDescription="Lan Cable"</xpathExpr>
```

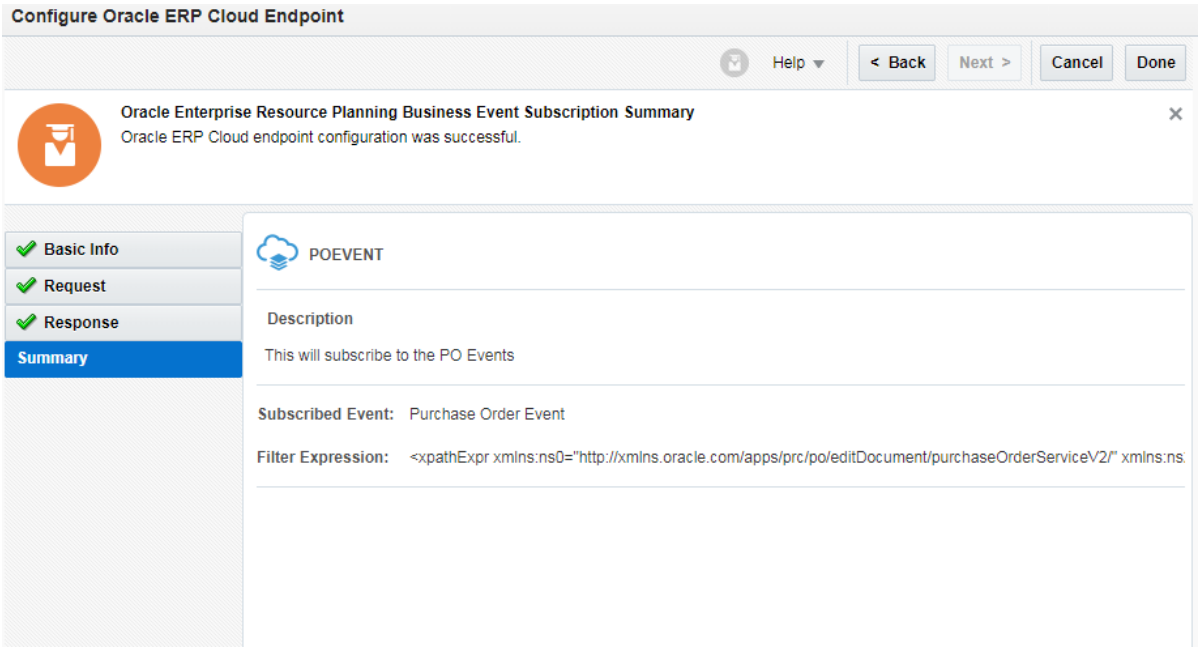
Note: Change the highlighted value to some Item Description of your choice to filter the PO Record that you would be creating in ERP Cloud later. This is important as to filter your PO because multiple Users would be creating PO Event flows.



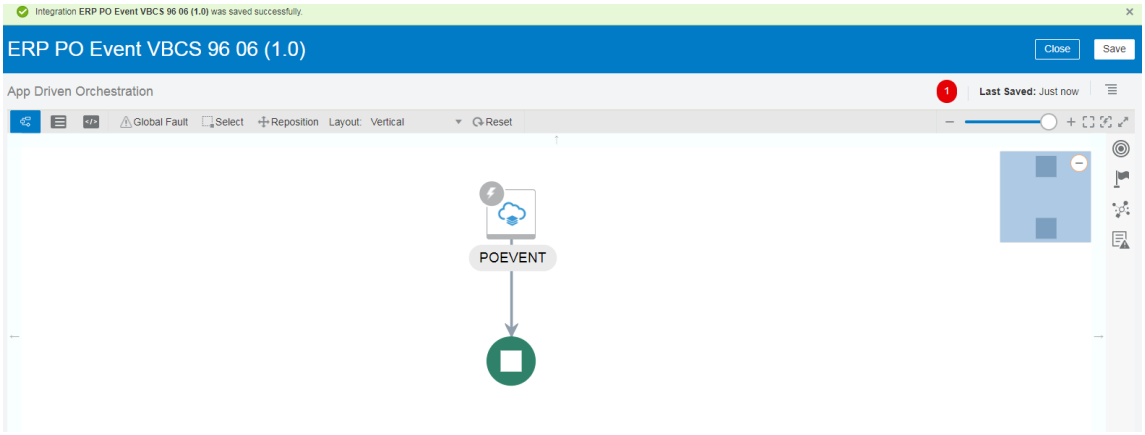
10. Select the Response type as “None” and Click Next



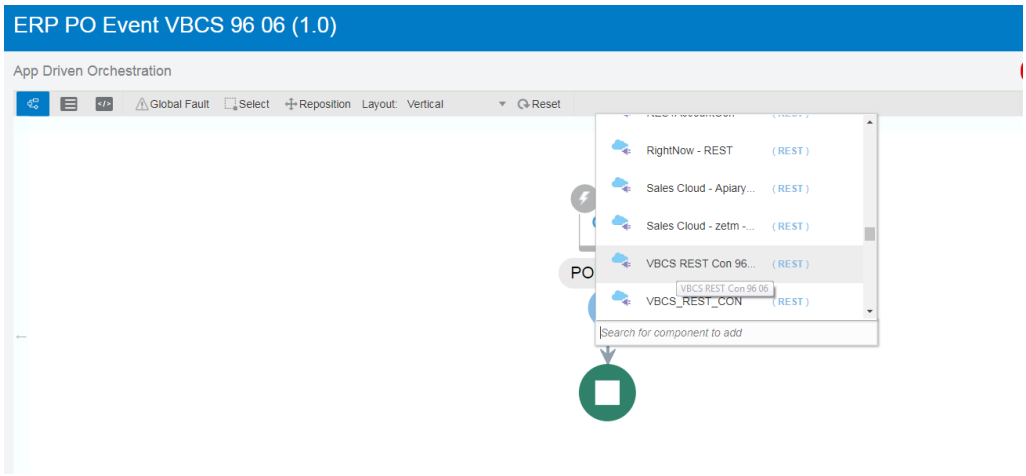
11. Review summary page and Click Done



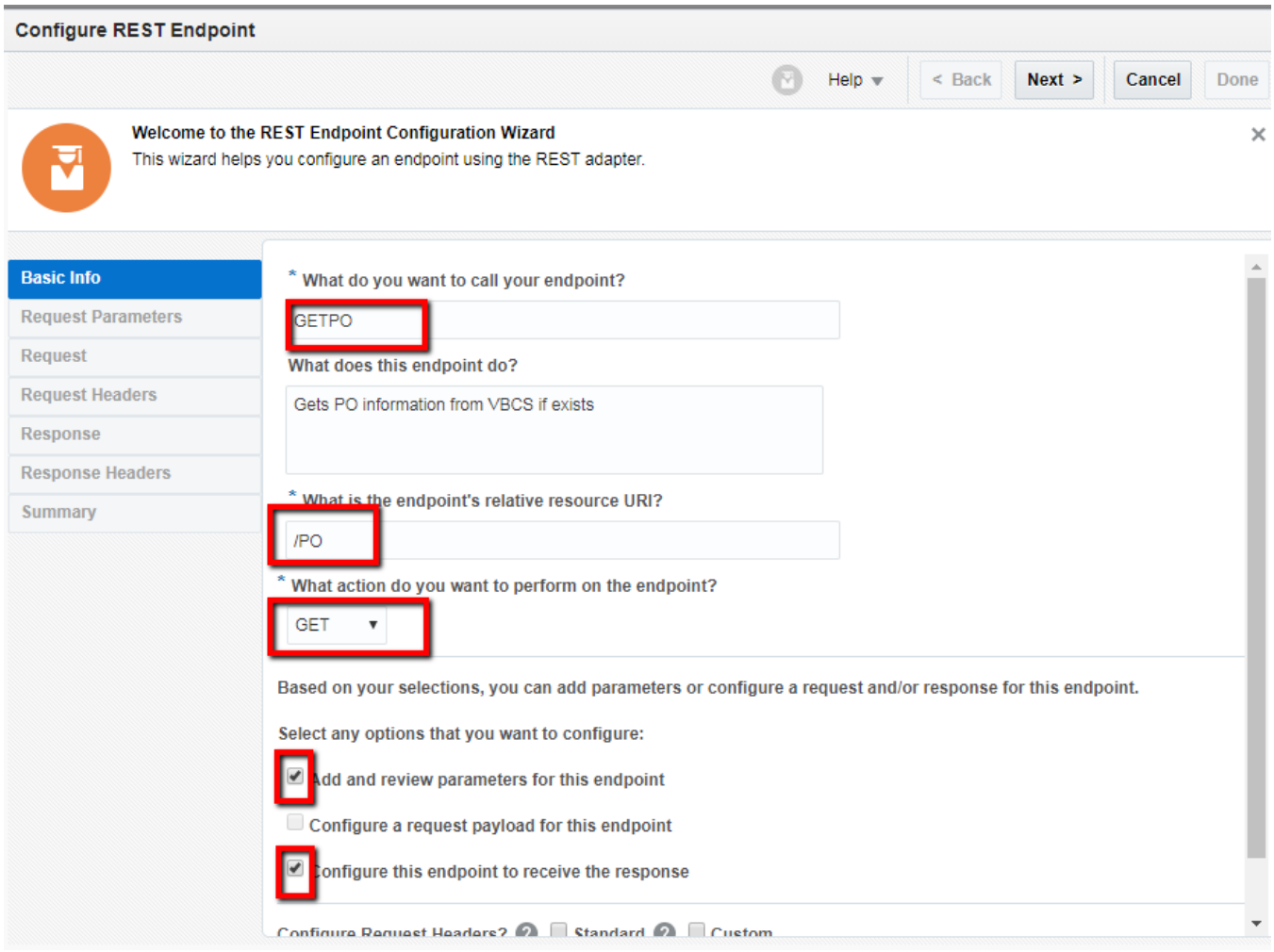
12. Integration so far



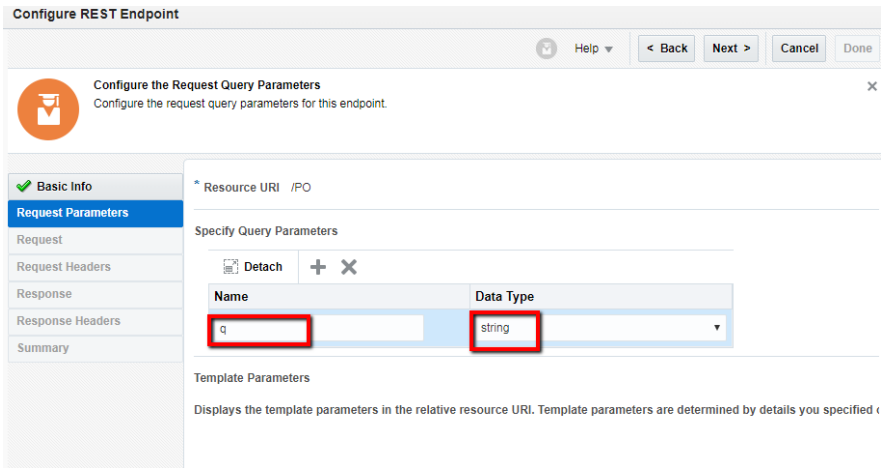
13. Next we will add the Invoke Action Using the REST connection created earlier to verify if the PO exists in VBCS PO table. Hover on the wiring next to the "POEVENT" and click on "+" sign and Select the REST Connection (VBCS_REST_CON_<ClassId>_<StudentId>)



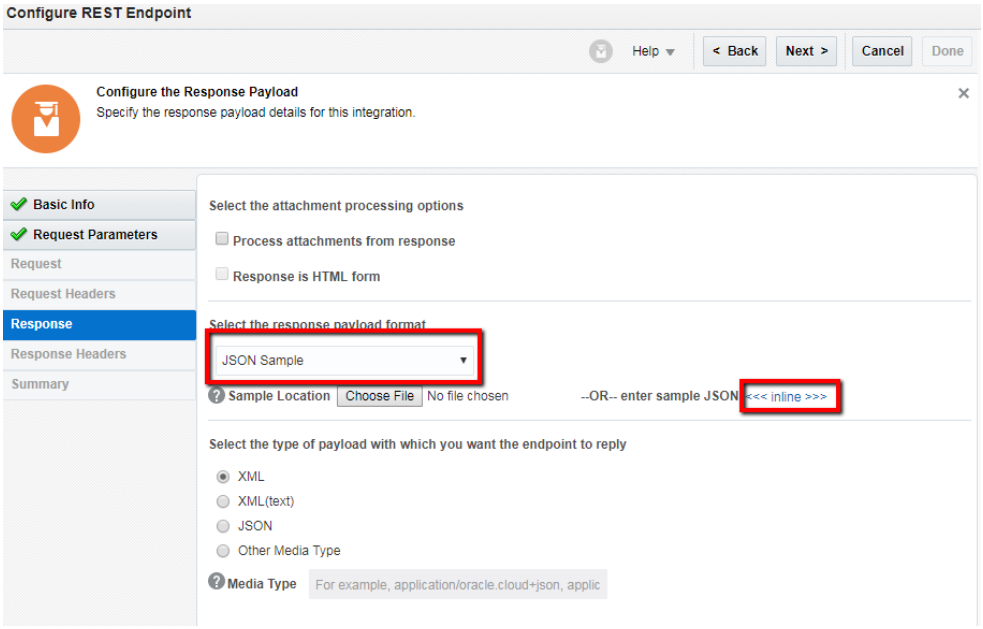
14. In the “Basic Info” page provide the details as per the screenshot below and Click Next



15. In the Request Parameters page Add a query parameter as per below and Click Next. We wanted to search for a PO which can be invoked using below query parameter format
Ex:
https://<oid_host>/ic/builder/design/LetterOfCreditPortal/1.0/resources/data/PO?q=pOHeaderId=300000074157561



16. In the Response page Select the Response payload format as JSON

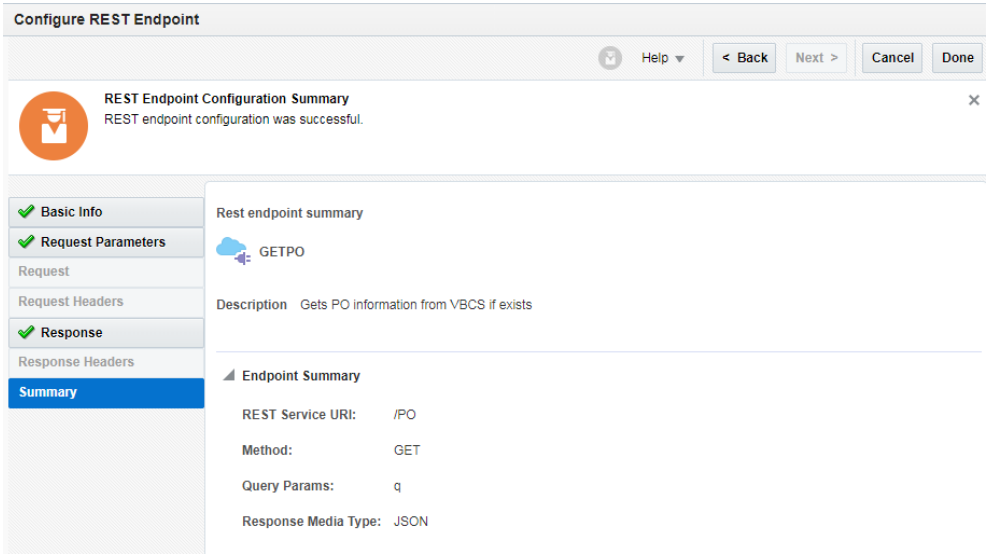


Select “inline” and enter the below JSON sample in the text area and Click OK. Select Next

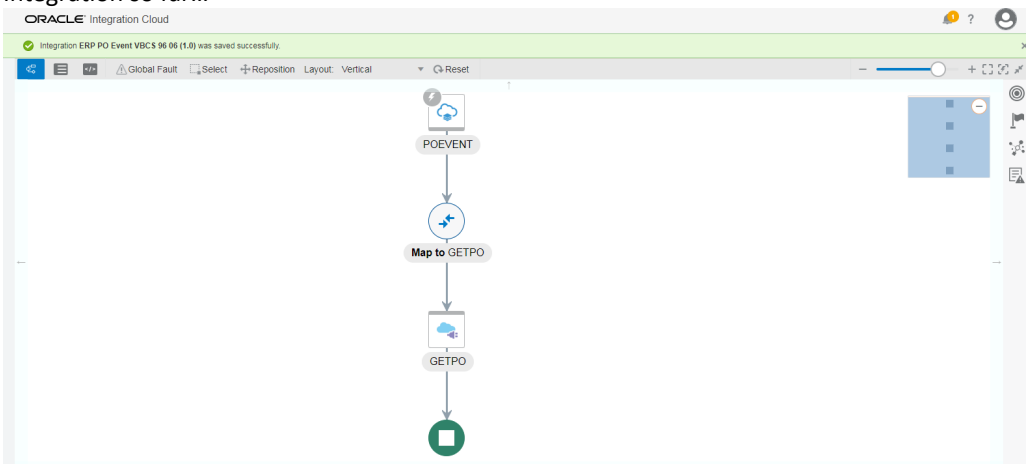

```
{
  "items": [
    {
      "id": 24,
      "creationDate": "2019-01-13T23:12:09+00:00",
      "lastUpdateDate": "2019-01-13T23:12:09.027+00:00",
      "createdBy": "john.doe@example.com",
      "lastUpdatedBy": "john.doe@example.com",
      "pOHeaderId": "300000074157561",
      "orderNumber": "162180",
      "procurementBUId": "300000046987012",
      "procurementBusinessUnit": "US1 Business Unit",
      "supplierId": "300000047414679",
      "supplier": "Dell Inc.",
      "soldToLegalEntity": "US1 Legal Entity",
      "lOCId": null,
      "links": [
        {
          "rel": "self",
          "href": "https://oic_host/ic/builder/design/LetterOfCreditPortal/1.0/resources/data/PO/24",
          "name": "PO",
          "kind": "item",
          "properties": {
            "changeIndicator":
"ACED0005737200136A6176612E7574696C2E41727261794C6973747881D21D99C7619D03000149000473697A65787
0000000017704000000001737200106A6176612E6C616E672E446F75626C6580B3C24A296BFB0402000144000576616C
7565787200106A6176612E6C616E672E4E756D62657286AC951D0B94E08B02000078703FF000000000000078"
          }
        },
        {
          "rel": "canonical",
          "href": "https://oic_host/ic/builder/design/LetterOfCreditPortal/1.0/resources/data/PO/24",
```

```
            "name": "PO",
            "kind": "item"
          }
        ]
      }
    ],
    "count": 1,
    "hasMore": false,
    "limit": 25,
    "offset": 0,
    "links": [
      {
        "rel": "self",
        "href": "https://oic_host/ic/builder/design/LetterOfCreditPortal/1.0/resources/data/PO",
        "name": "PO",
        "kind": "collection"
      }
    ]
}
```


17. In the Summary page review the information and click Done

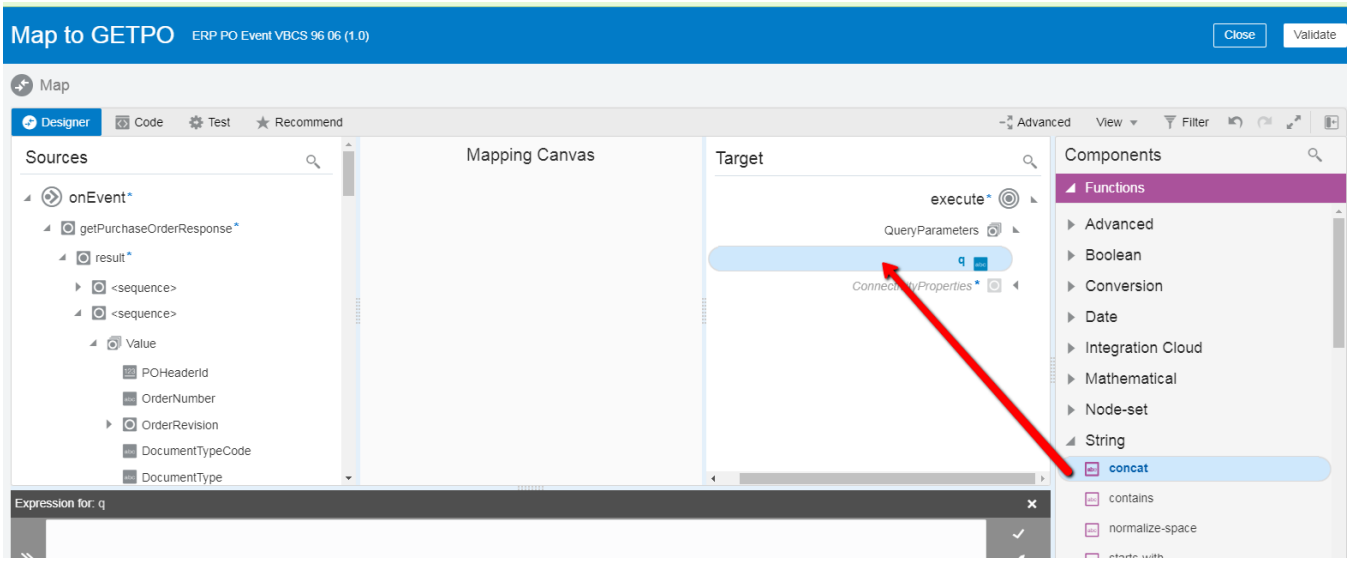


18. Integration so far…

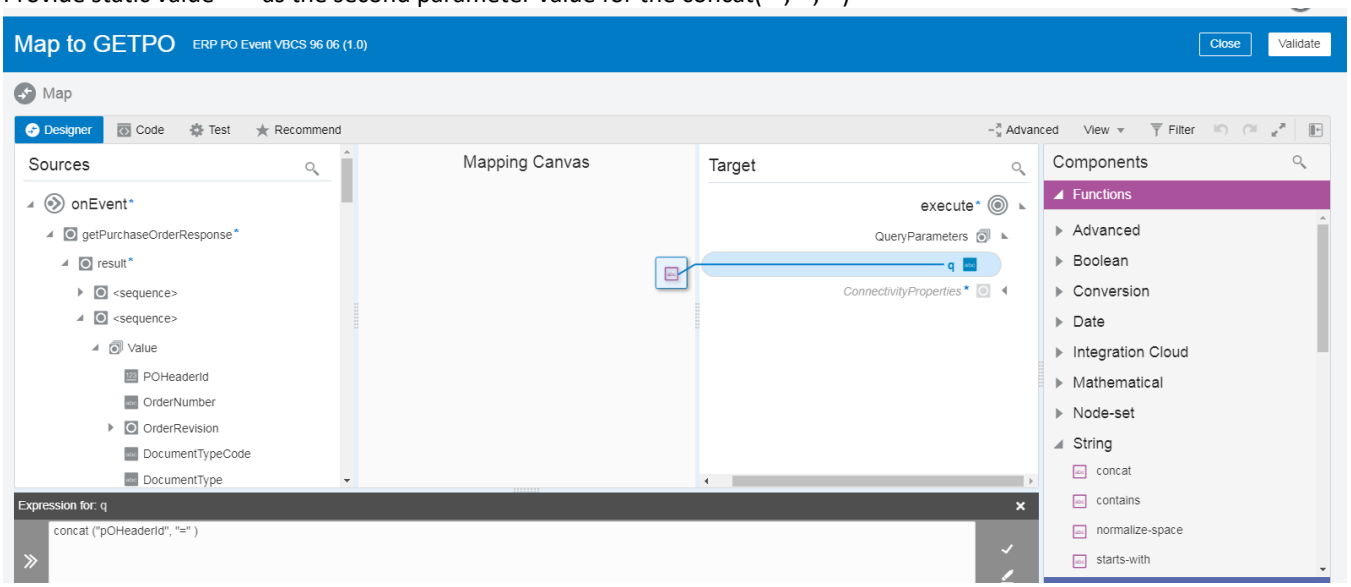


19. A Map Action (Map to GETPO) is created automatically. Perform the mapping as per below. Select the Map Action and Click on “Edit” to open the Mapper

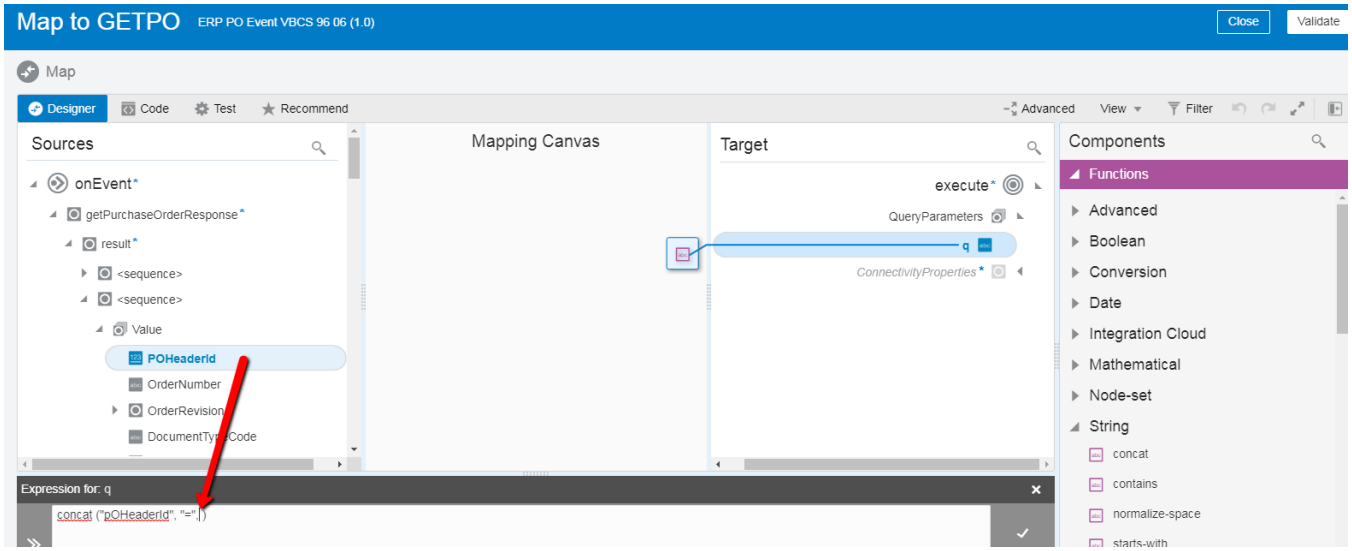
Select the “q” Query Parameter from the Target, drag and drop the concat function to build query parameter value as “pOHeaderId=300000074157561”.



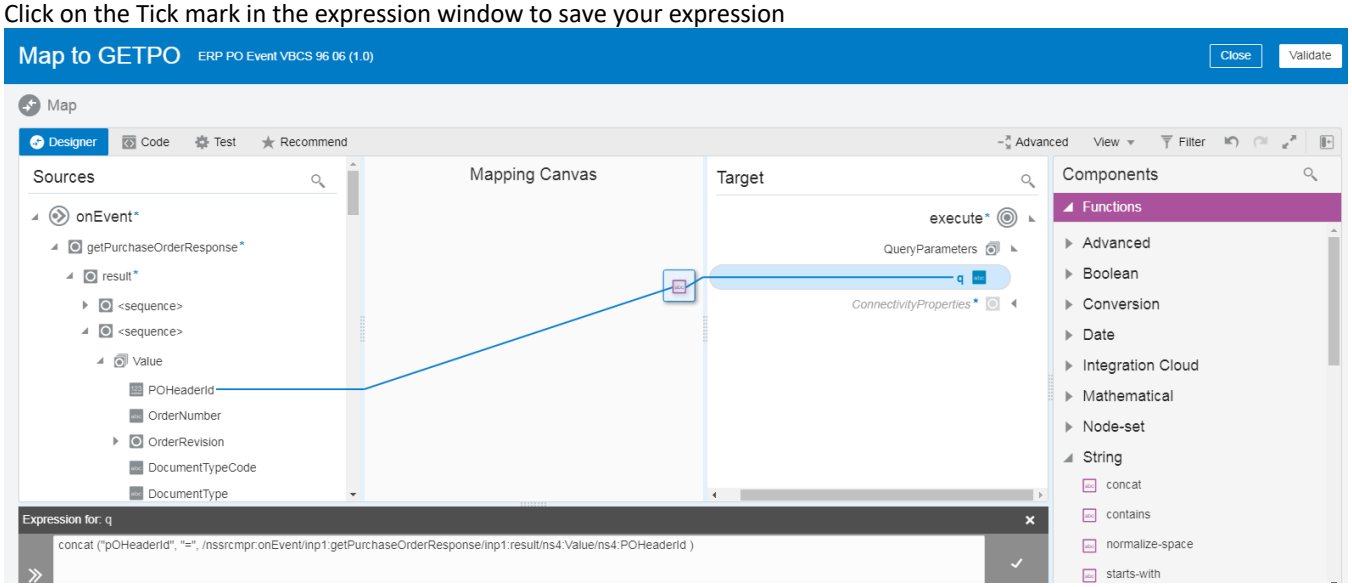
Provide static value “pOHeaderId” as the first parameter value for the concat(“”,””,””)
Provide static value “=” as the second parameter value for the concat(“”,””,””)



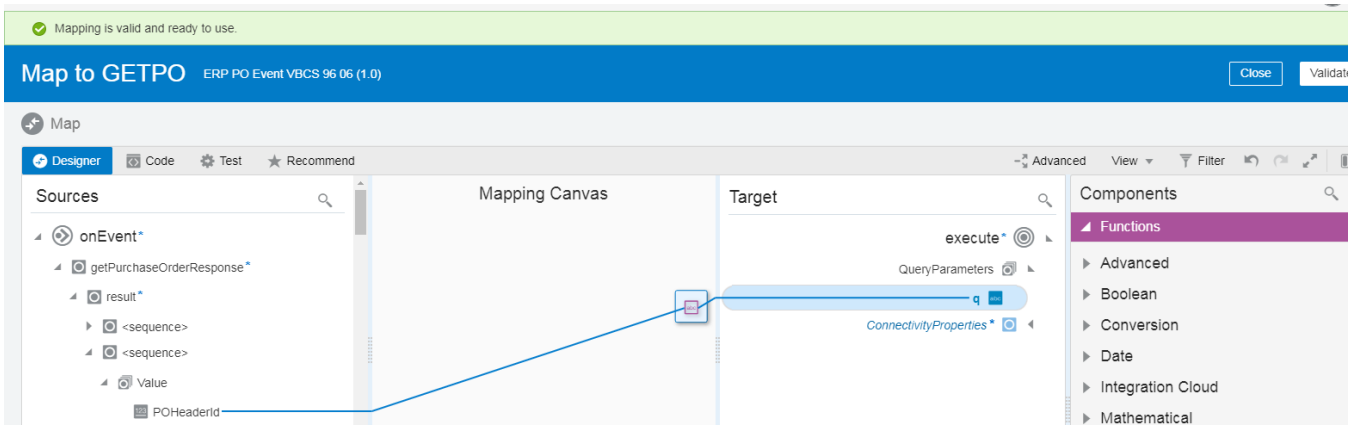
Provide the third parameter value by dragging the “POHeaderId” element inside the concat(“”,””,””)



Click on the Tick mark in the expression window to save your expression

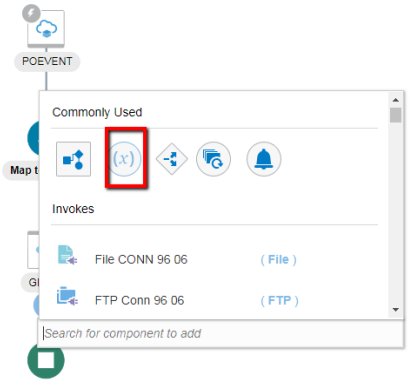


Click on Validate to check for any errors.

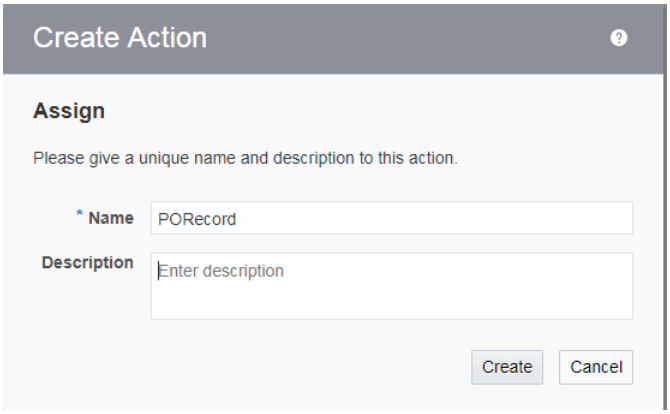


Save your integration

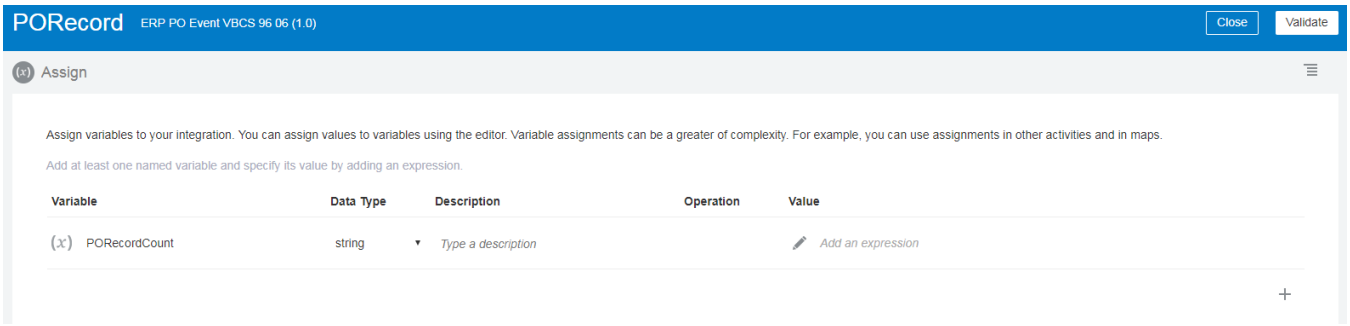
20. Now, we will assign PO Record Count value to a variable “POHeaderId”
    Hover on the wiring next to “GETPO” and click on “+” sign and Select Assign Action



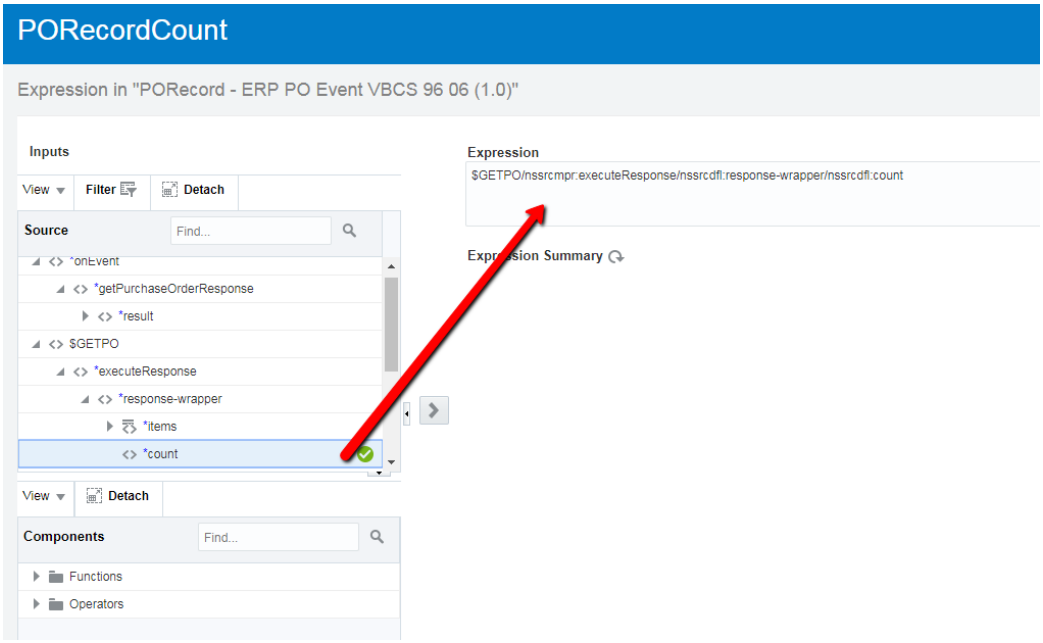
Provide a name for the Assign Action and Click on Create



Click on “+” to add a new Variable. Add a variable “PORecordCount” of Data type string

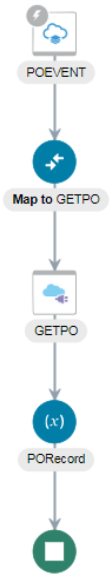


Click the pencil icon to “Add an expression” to assign record count value. In the expression builder drag and drop the count element that we got as a response from the GETPO API call from the earlier step.



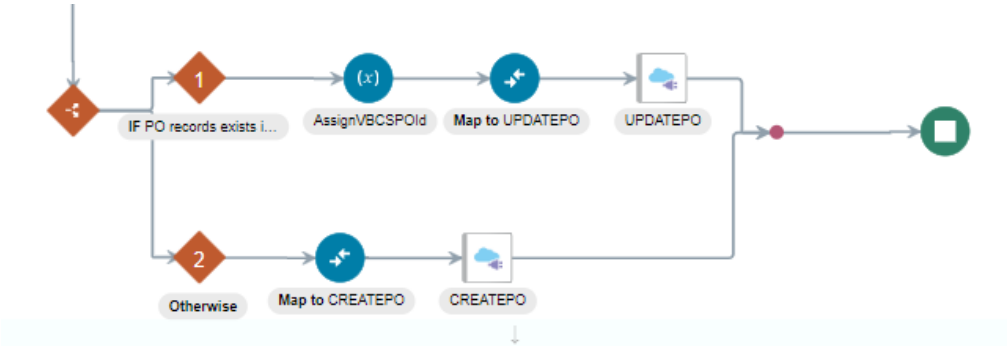
Validate and Close the Expression Builder…Save your integration

Integration so far…

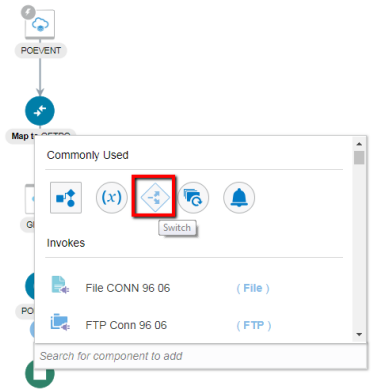


21. Next we will try to build an if-else logic as per below pseudo code

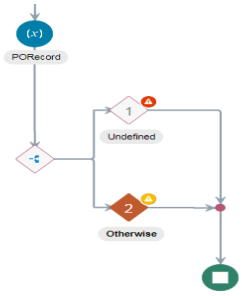
Search for PO record based on POHeaderID (Implemented already in previous steps)
If (count of PORecords in VBCS) = 1
- Update existing VBCS PO Record
Else
- Insert a new PO Record



Hover on the wiring next to the PORecord Acitivity and Select the “Switch” Action

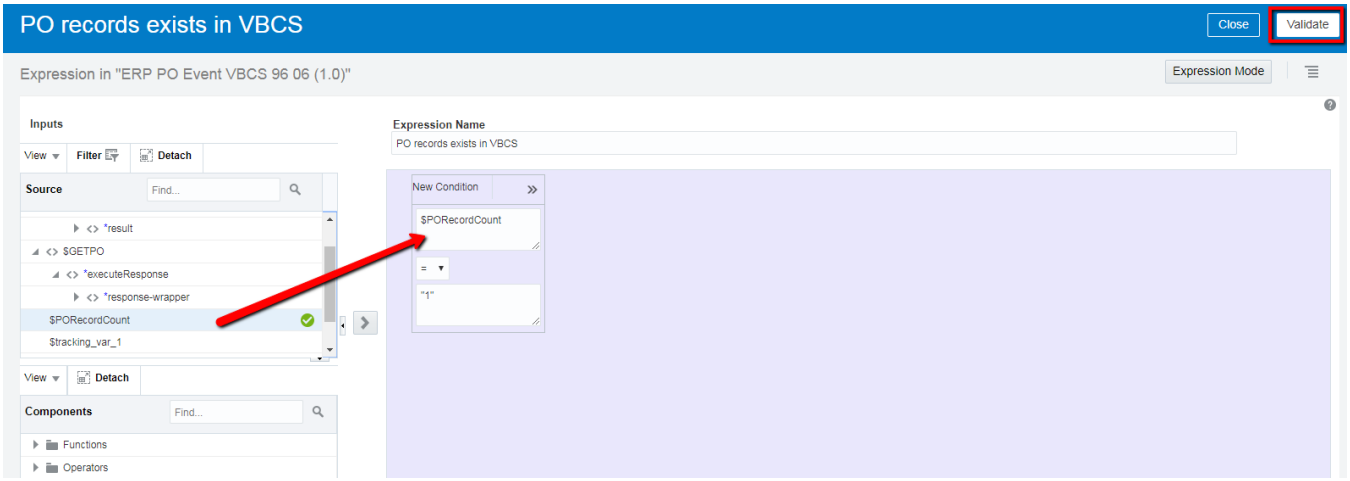


Below construct is created



If – Flow (Condition 1)

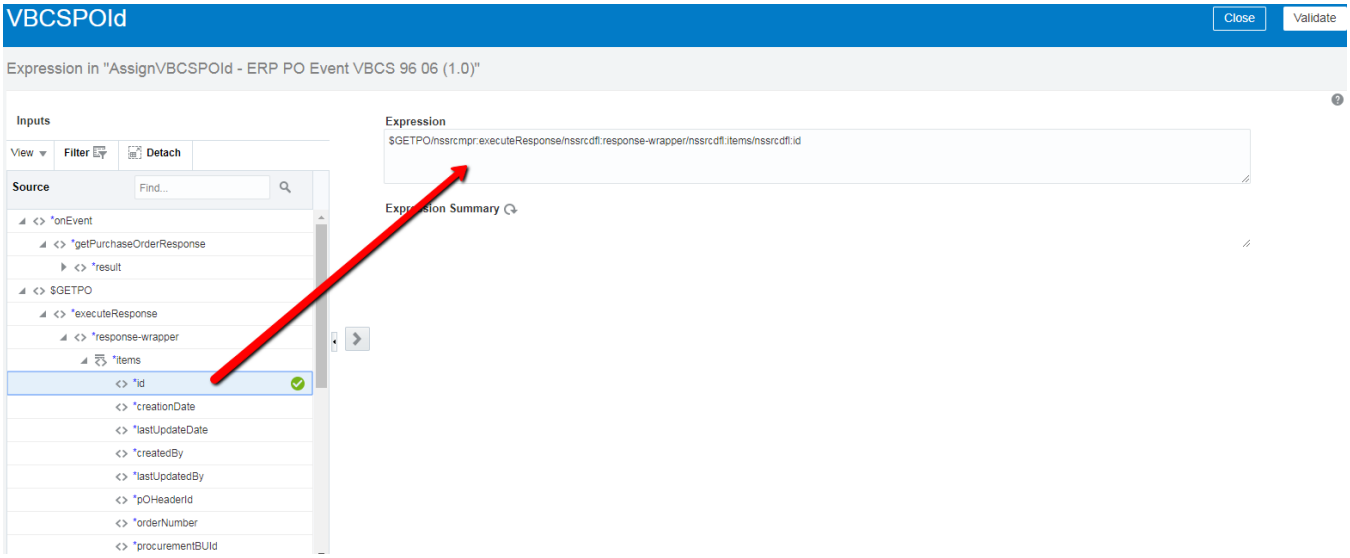
Select Condition “1” and click on Edit icon which brings up an Expression builder and provide the condition as per below

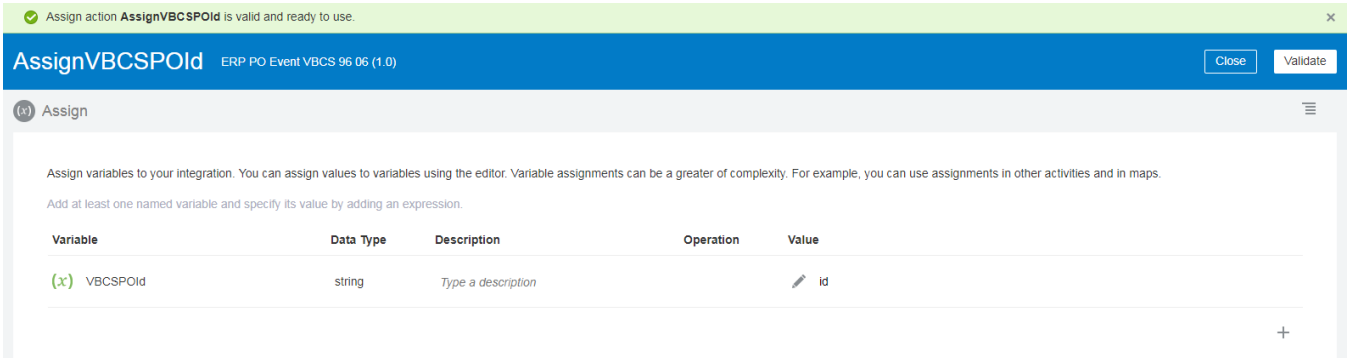


22. Hover on the wiring next to the If Condition (1) Action and Click on “+” Sign and select the “Assign” Action

    Provide a name for the Assign Action as “AssignVBCSPOId”

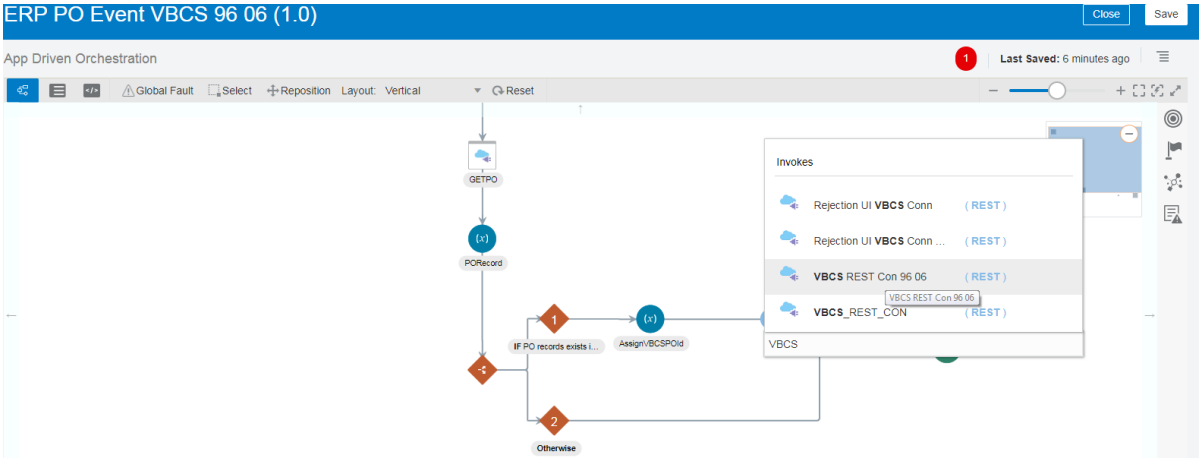
    Create a Variable “VBCSPOId” of String data type and add an expression as below. Validate and Close the expression builder.



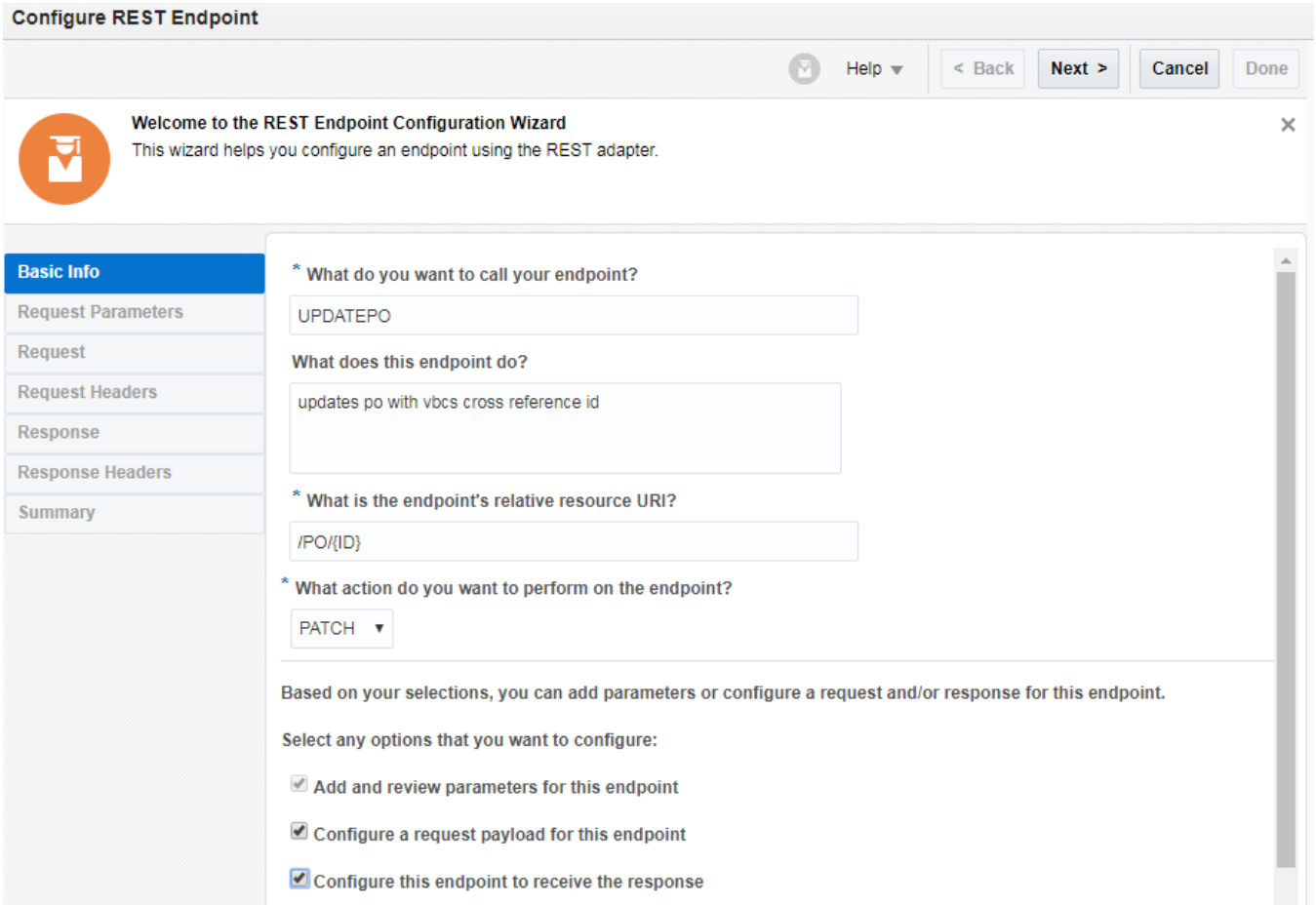


    Validate and Close the Assign window. Save your integration.

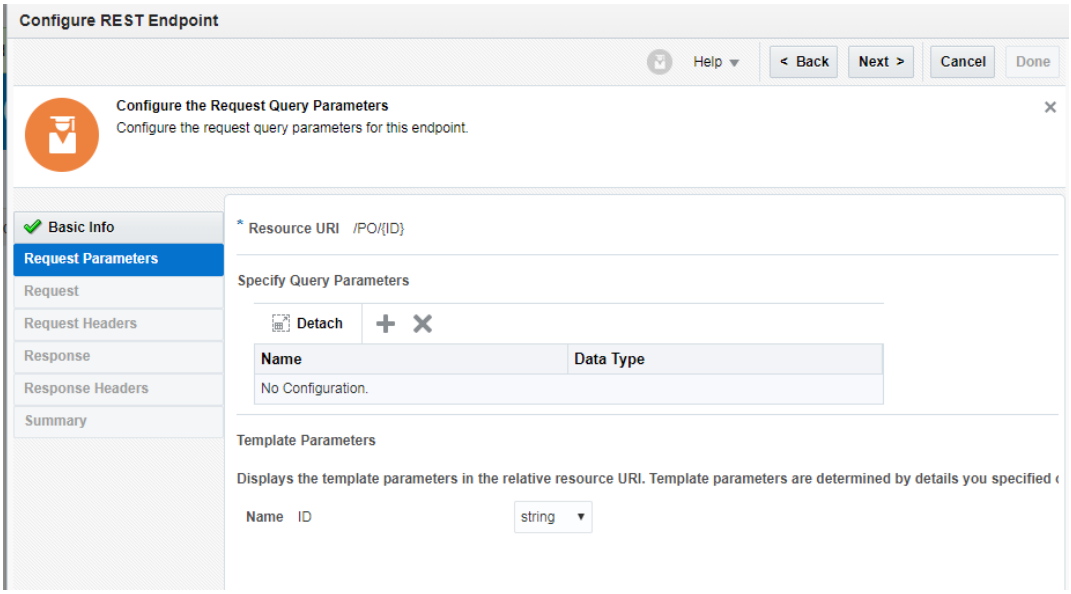
23. Hover on the wiring next to the Assign Action and Click on “+” Sign and select the REST Connection created earlier ex: VBCS_REST_CON_<ClassId>_<StudentId>



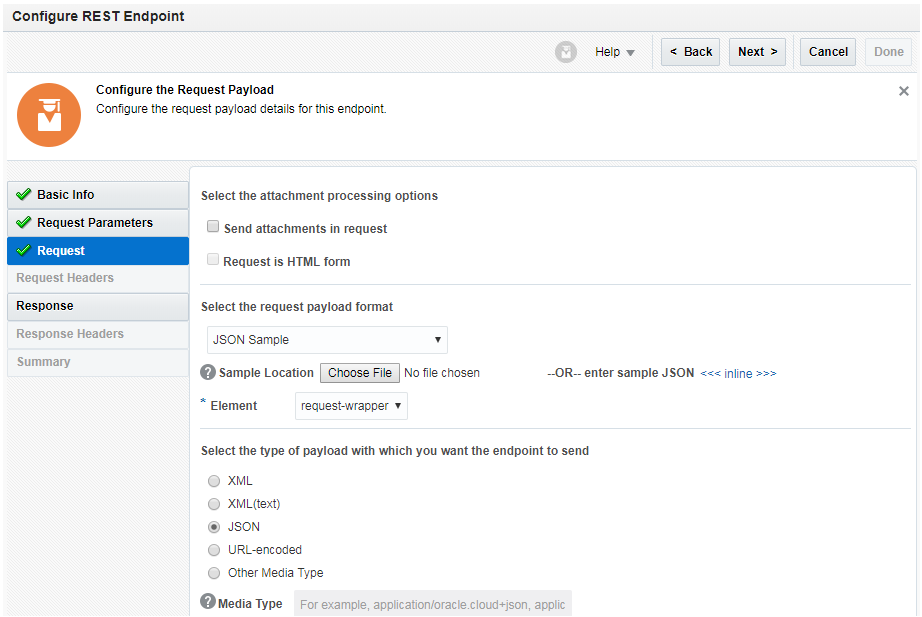
24. In the Basic Info Page provide the details as per below and Click Next



25. Nothing to Specify in Review Parameters page. Click Next



26. In the Request Page Select the request payload format as “JSON Sample”. Select the “inline” link and provide the below Sample JSON request and Click Next

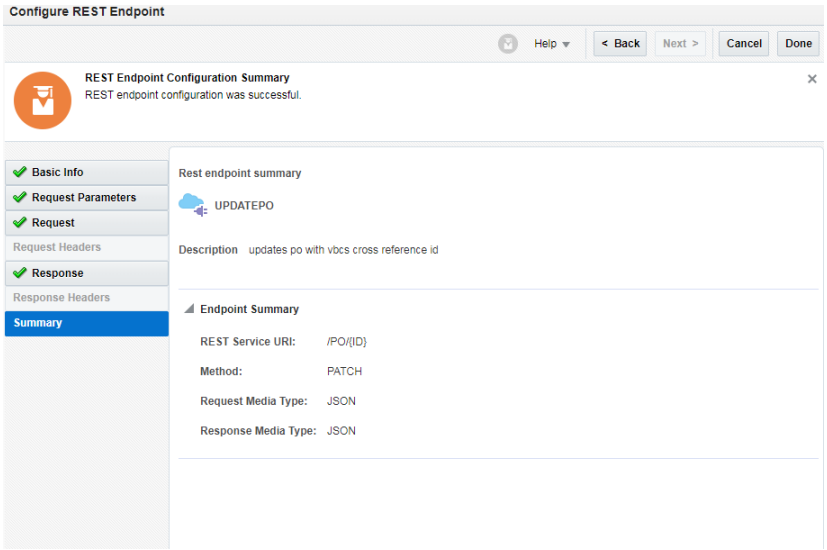



```
{
  "orderNumber": "163521",
  "procurementBUId": "300000046987012",
  "procurementBusinessUnit": "US1 Business Unit",
  "supplierId": "300000047414679",
  "supplier": "Dell.",
  "soldToLegalEntity": "US1 Legal Entity",
  "IOCId": 2
}
```

27. In the Response page Select the request payload format as “JSON Sample”. Select the “inline” link and provide the below Sample JSON Response and Click Next

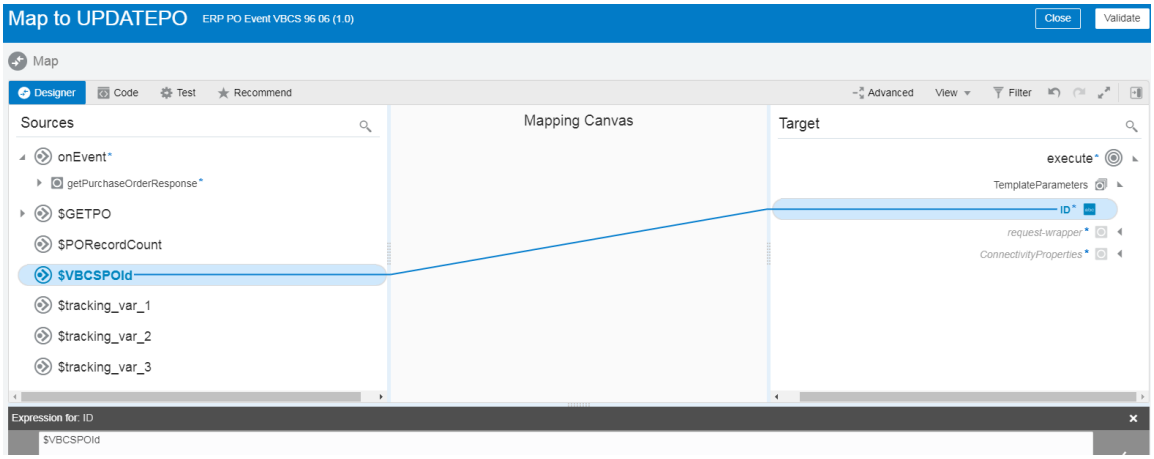
```
{
   "id": 24,
   "creationDate": "2019-01-13T23:12:09+00:00",
   "lastUpdateDate": "2019-01-22T16:46:08+00:00",
   "createdBy": "john.doe@example.com",
   "lastUpdatedBy": "john.doe@example.com",
   "pOHeaderId": "300000074157561",
   "orderNumber": "163521",
   "procurementBUId": "300000046987012",
   "procurementBusinessUnit": "US1 Business Unit",
   "supplierId": "300000047414679",
   "supplier": "Dell.",
   "soldToLegalEntity": "300000046973970",
   "lOCId": null,
   "links": [
      {
         "rel": "self",
         "href": "https://oic_host/ic/builder/design/LetterOfCreditPortal/1.0/resources/data/PO/24",
         "name": "PO",
         "kind": "item",
         "properties": {
            "changeIndicator":
"ACED0005737200136A6176612E7574696C2E41727261794C6973747881D21D99C7619D03000149000473697A65787
000000001770400000001737200106A6176612E6C616E672E446F75626C6580B3C24A296BFB04020001440005766 16C
7565787200106A6176612E6C616E672E4E756D62657286AC951D0B94E08B020000787040000000000000078"
         }
      },
      {
         "rel": "canonical",
         "href": "https://oic_host/ic/builder/design/LetterOfCreditPortal/1.0/resources/data/PO/24",
         "name": "PO",
         "kind": "item"
      }
   ]
}
```


28. Review the Summary Page and Click on Done

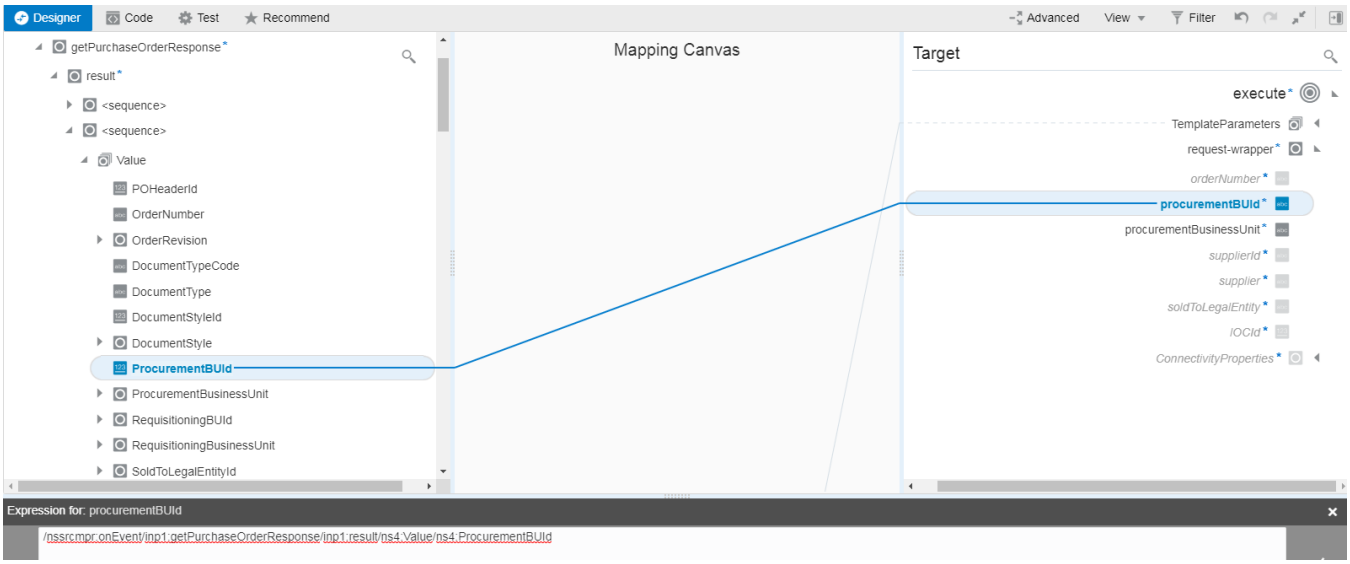


29. A Map Action (Map to UPDATEPO) is created. Select the Map Action and Click on Edit Icon and provide mapping as per below screenshots

    a. Map $VBCSPOId **TO** TemplateParameters-> ID

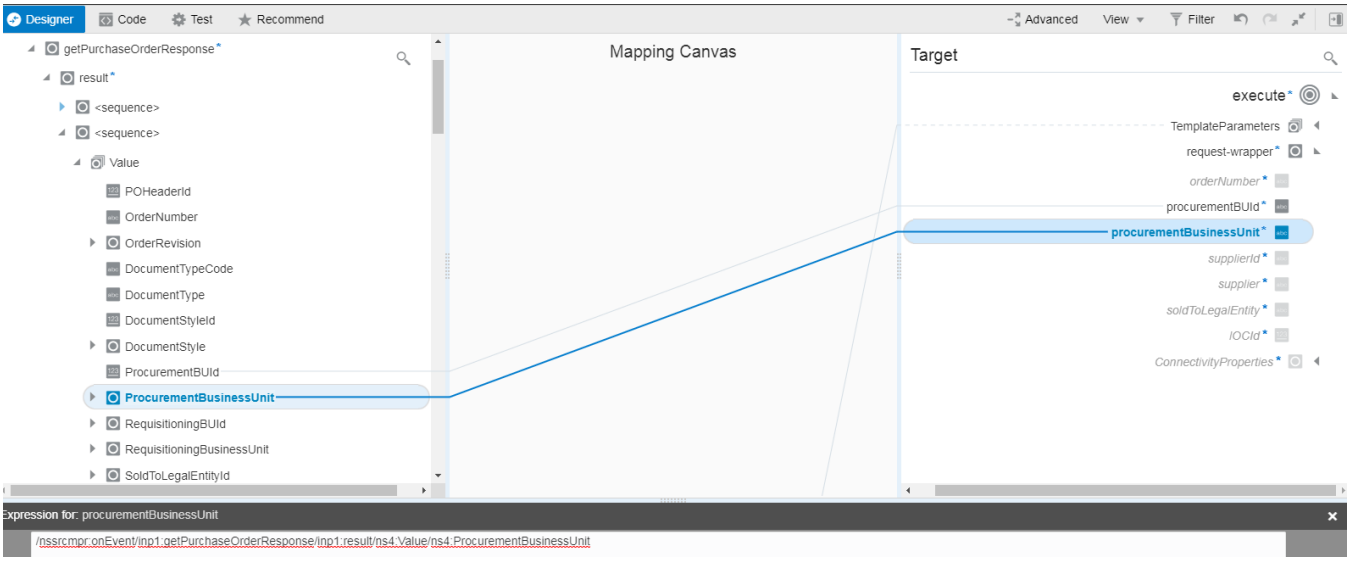


    b. Map onEvent -> getPurchaseOrderResponse->result-><sequence>->Value-> ProcurementBUId **TO** request-wrapper -> procurementBUId

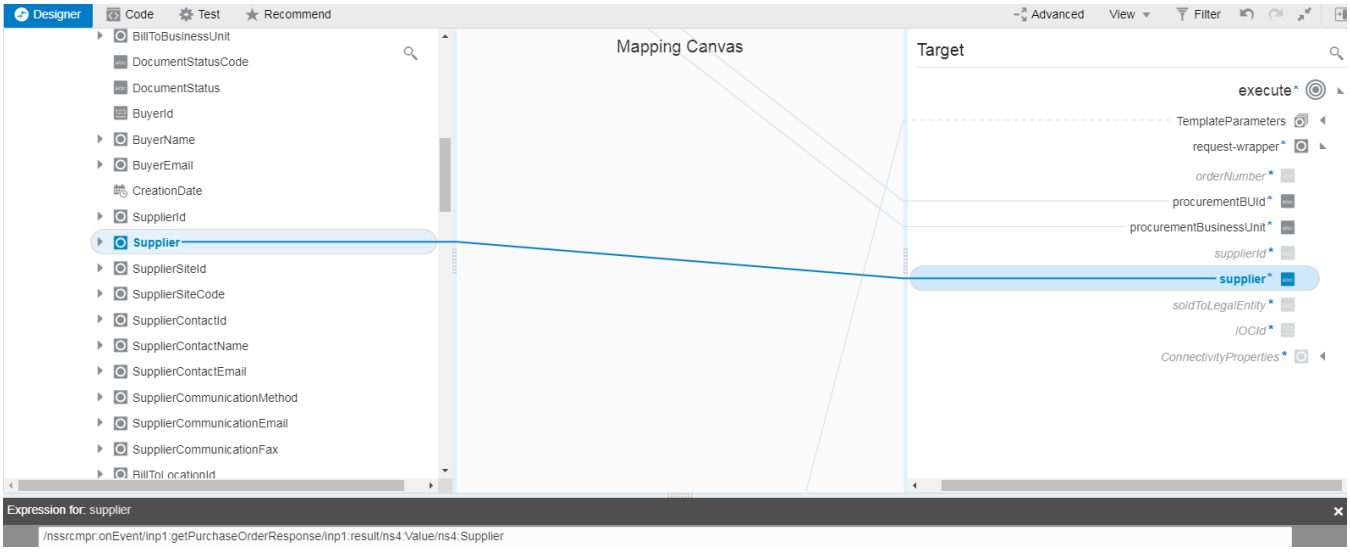


    c.
    d.

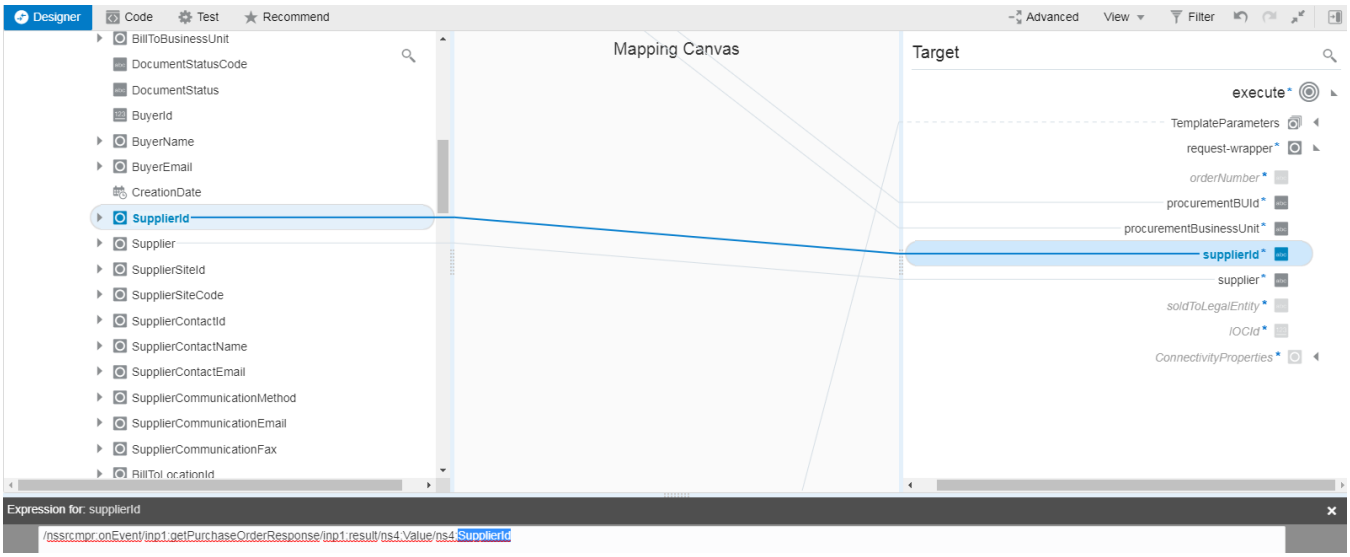
e. Map onEvent -> getPurchaseOrderResponse->result-><sequence>->Value-> ProcurementBusinessUnit
TO request-wrapper -> procurementBusinessUnit



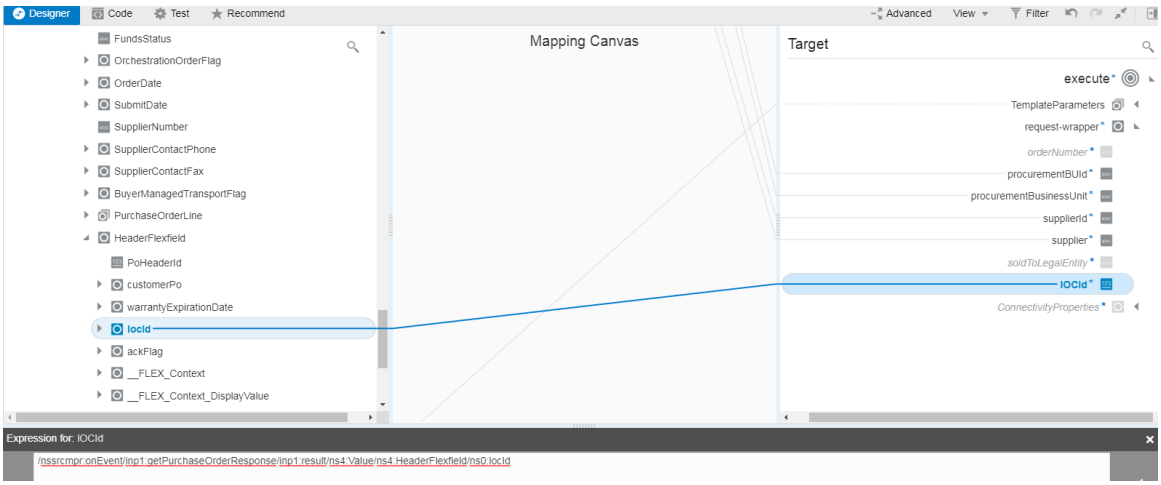
f. Map onEvent -> getPurchaseOrderResponse->result-><sequence>->Value-> Supplier
TO request-wrapper -> supplier



g. Map onEvent -> getPurchaseOrderResponse->result-><sequence>->Value-> SupplierId
TO request-wrapper -> supplierId

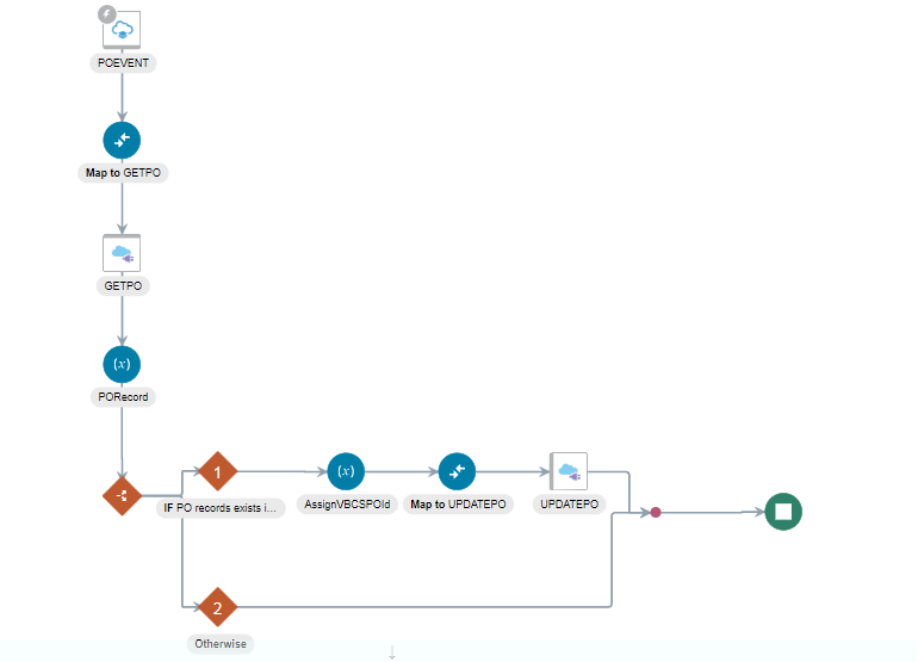


h. Map onEvent -> getPurchaseOrderResponse->result-><sequence>->Value-> HeaderFlexfield->locId
TO request-wrapper -> lOCId

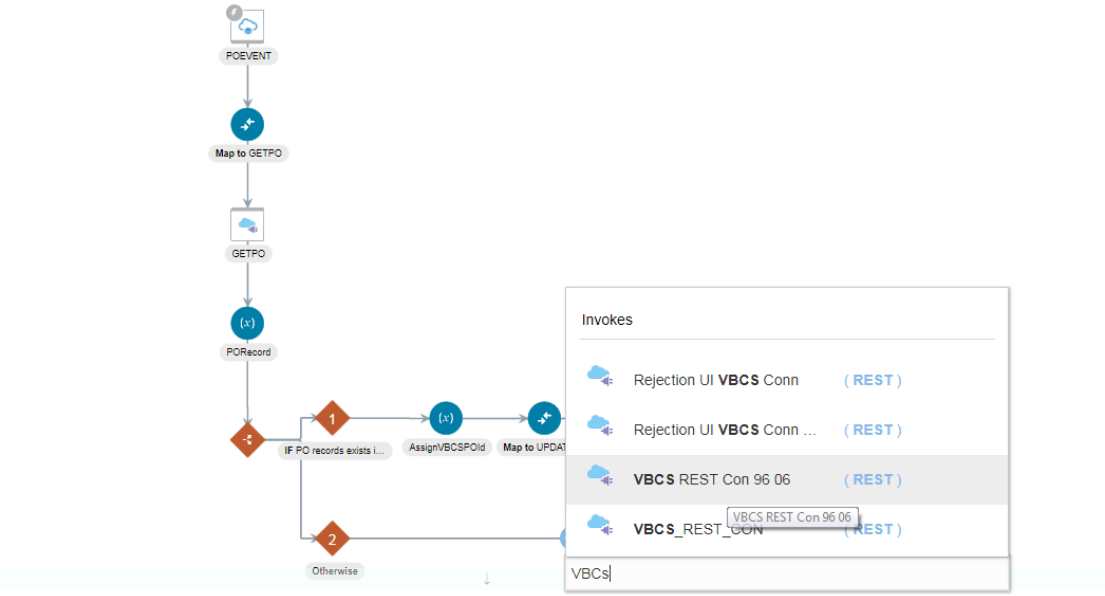


Click on Save and Validate. Close the mapper

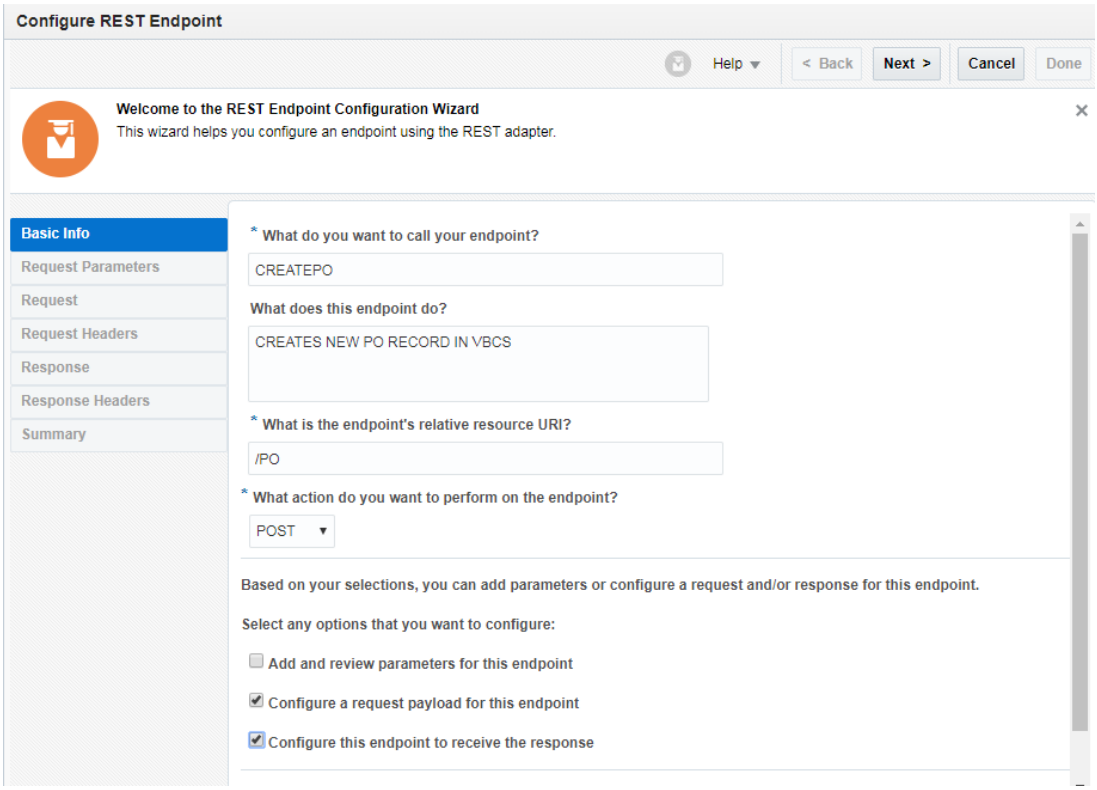
30. Integration flow so far…



31. **Else – Flow**
    Hover on the wiring next to “Otherwise “ Action and Select VBCS_REST_CON_<ClassId>_<StudentId> connection



32. In Basic Page configure the details as per below



33. In the Request Page Select the request payload format as “JSON Sample”. Select the “inline” link and provide the below Sample JSON request and Click Next

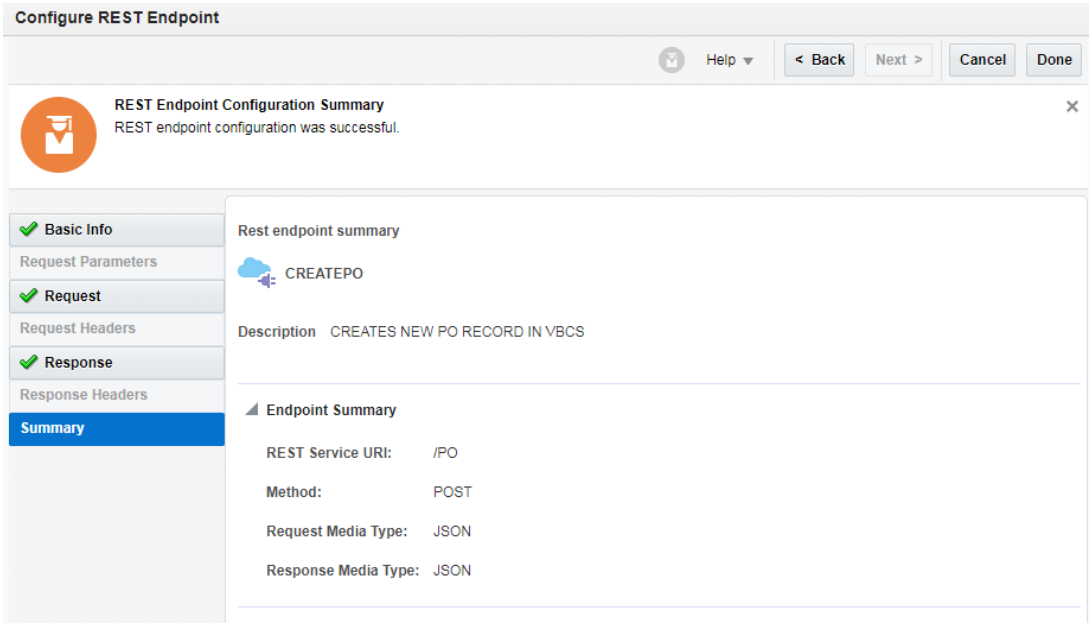
```
{
  "pOHeaderId": "300000074157551",
  "orderNumber": "163521",
  "procurementBUId": "300000046987012",
  "procurementBusinessUnit": "US1 Business Unit",
  "supplierId": "300000047414679",
  "supplier": "Dell Inc.",
  "soldToLegalEntity": "US1 Legal Entity"
}
```

34. In the Response Page Select the response payload format as “JSON Sample”. Select the “inline” link and provide the below Sample JSON response and Click Next

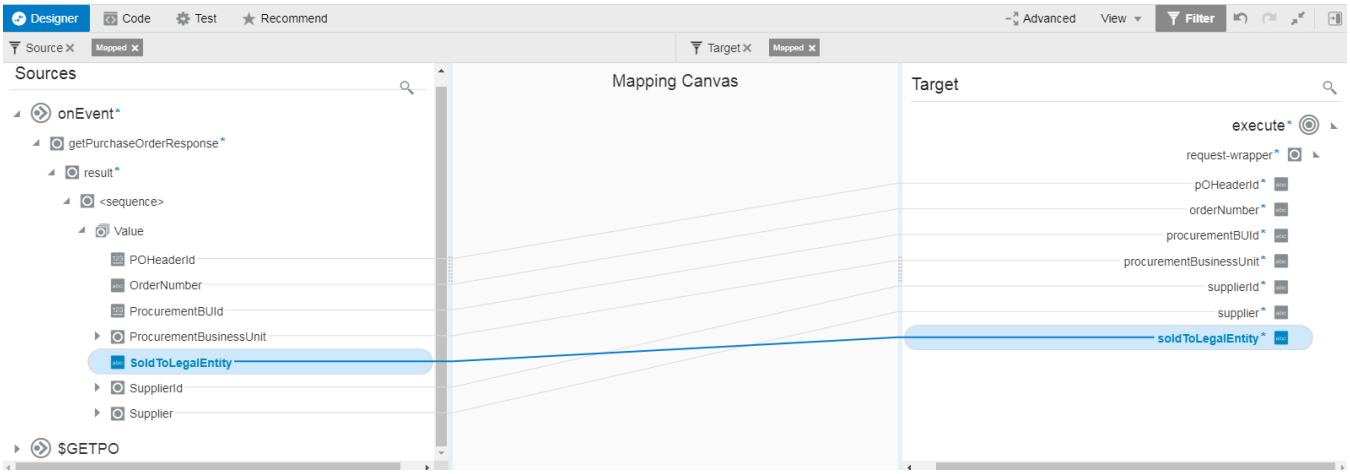
```
{
  "id": 41,
  "creationDate": "2019-01-22T17:32:24+00:00",
  "lastUpdateDate": "2019-01-22T17:32:24.027+00:00",
  "createdBy": "john.doe@example.com",
  "lastUpdatedBy": "john.doe@example.com",
  "pOHeaderId": "300000074157551",
  "orderNumber": "163521",
  "procurementBUId": "300000046987012",
  "procurementBusinessUnit": "US1 Business Unit",
  "supplierId": "300000047414679",
  "supplier": "Dell Inc.",
  "soldToLegalEntity": "300000046973970",
  "lOCId": null,
```

```
  "links": [
    {
      "rel": "self",
      "href": "https://oichost/ic/builder/design/LetterOfCreditPortal/1.0/resources/data/PO/41",
      "name": "PO",
      "kind": "item",
      "properties": {
        "changeIndicator":
"ACED0005737200136A6176612E7574696C2E41727261794C6973747881D21D99C7619D03000149000473697A657870000
00001770400000001737200106A6176612E6C616E672E446F75626C6580B3C24A296BFB0402000144000576616C75657872
00106A6176612E6C616E672E4E756D62657286AC951D0B94E08B02000078703FF000000000000078"
      }
    },
    {
      "rel": "canonical",
      "href": "https://oichost/ic/builder/design/LetterOfCreditPortal/1.0/resources/data/PO/41",
      "name": "PO",
      "kind": "item"
    }
  ]
}
```

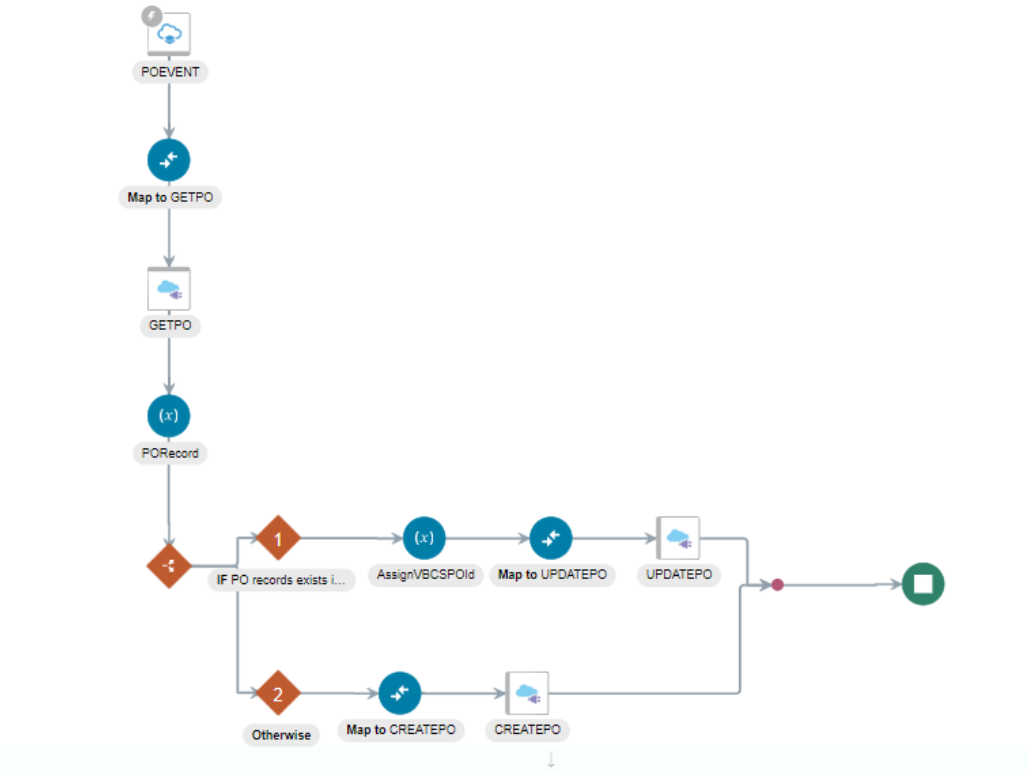

35. Review the Summary and Click Done



36. A Map Action is created. Provide the mapping for the Map Action (Map to CREATEPO) as per the screenshot below

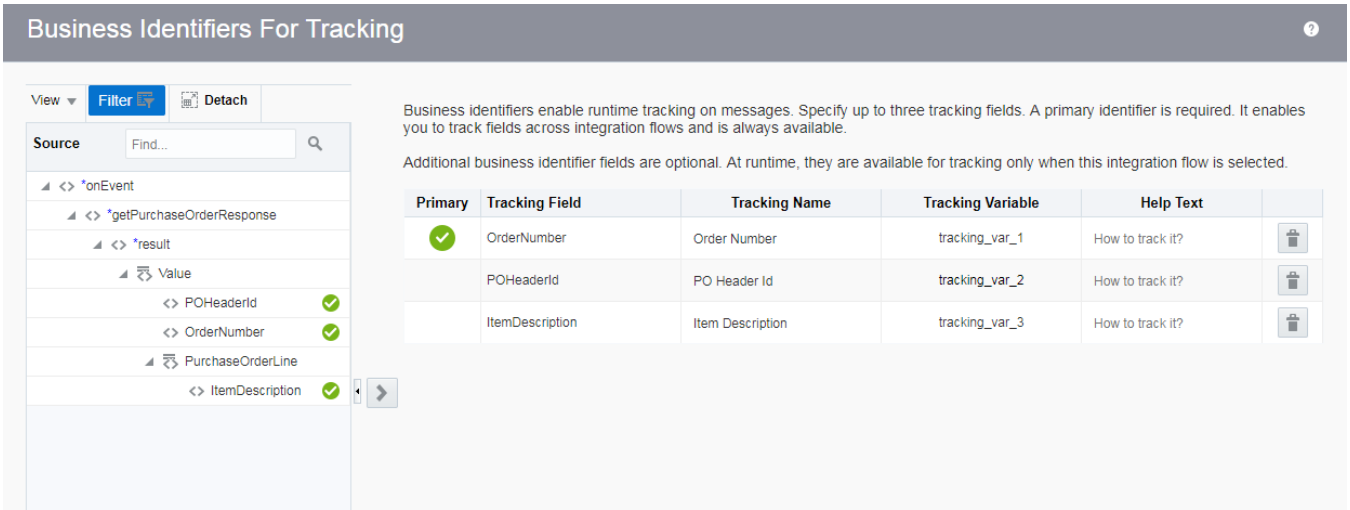


37. Final Flow 1 Integration



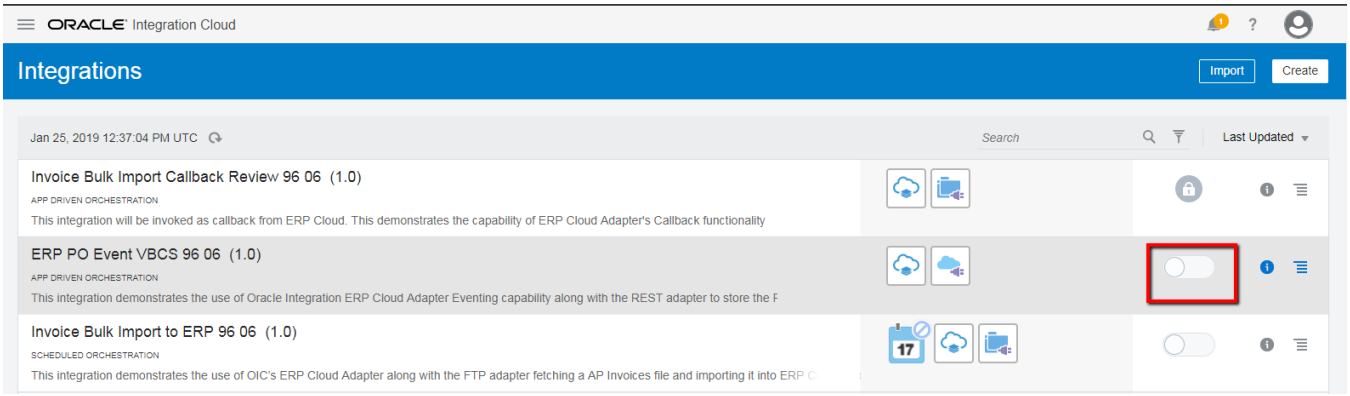
Save your integration flow.

38. While you are in the Integration flow page, Select the Hamburger icon on the TOP right corner and click on Tracking. Configure OrderNumber, POHeaderId and ItemDescription as tracking identifiers to identify your instance quickly when we a PO is created in ERP Cloud. Click Save on the Tracking page.

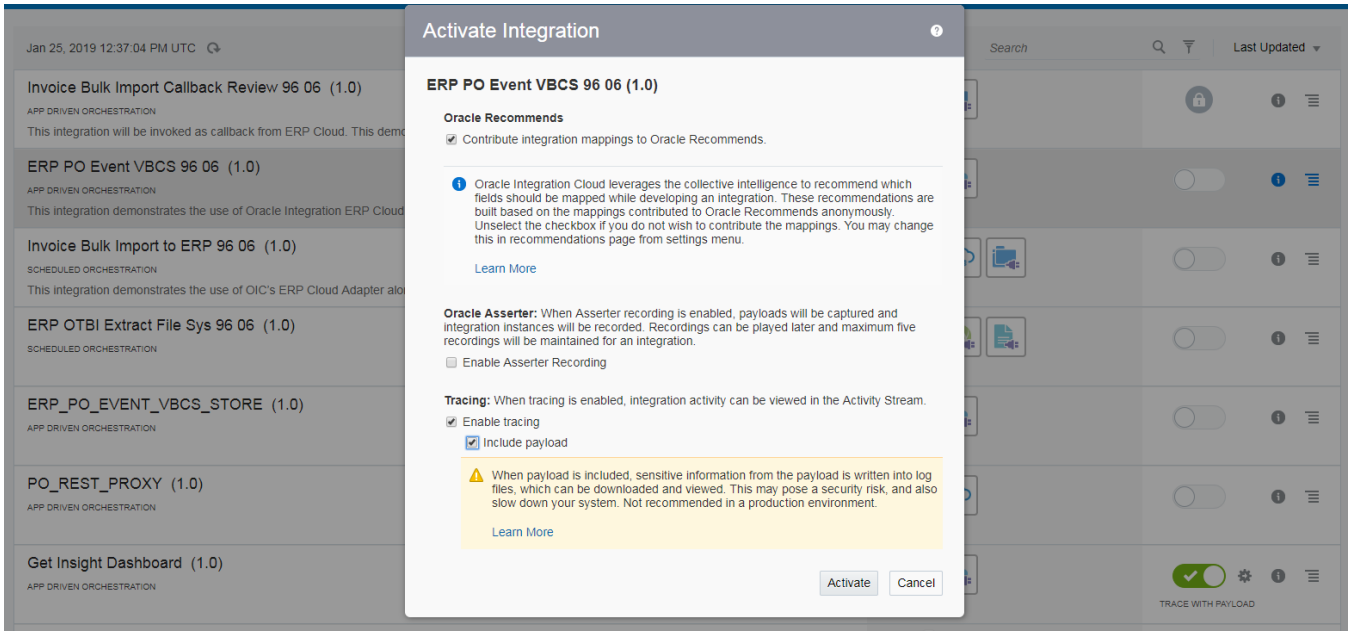


Activate Integration (Flow1)

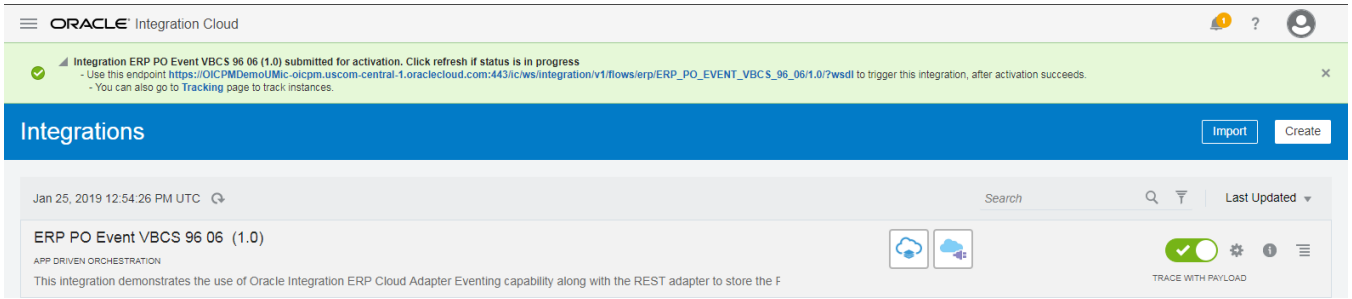
1. On the Integrations page, click on the "*ERP PO EVENT VBCS <ClassId> <StudentId>*" flow using the slider button



2. Check the *Oracle Recommends* check box to contribute your mappings to the Recommendations engine that then suggests mappings to you and other users for similar integrations. Also, check *Enable tracing* and *Enable payload* for debugging and troubleshooting (you would typically have the tracking and payload options disabled on production instances, but we enable them here for this lab).

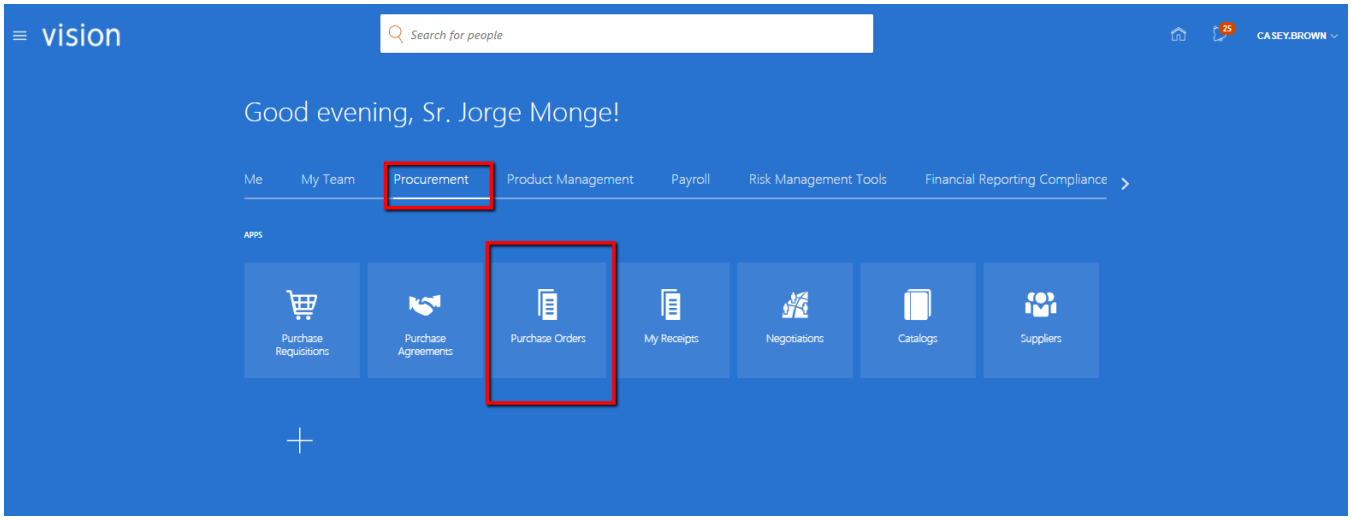


3. The activation should complete in a few seconds typically and show a green ribbon at the top.

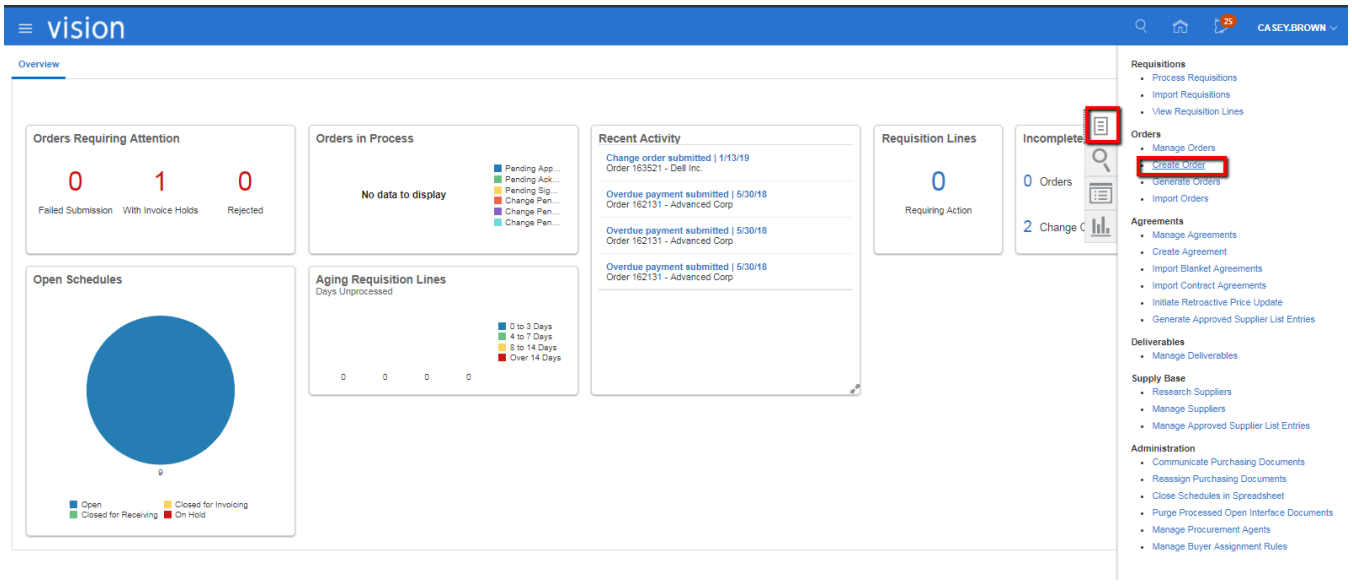


Testing the ERP Event Flow Integration (Flow1)

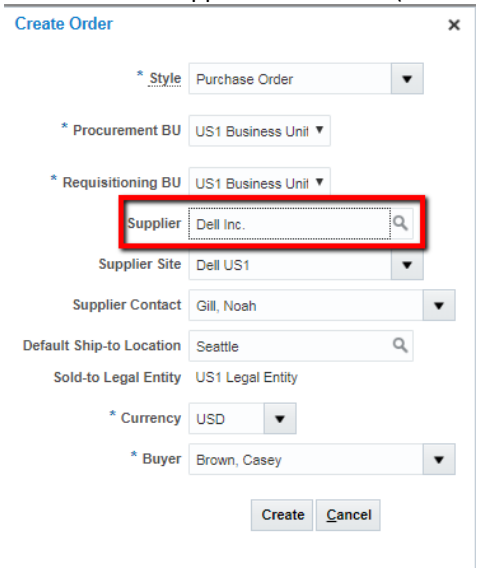
1. Login into ERP Cloud as casey.brown with the credentials provided
2. Select Procurement tab and click on Purchase Orders



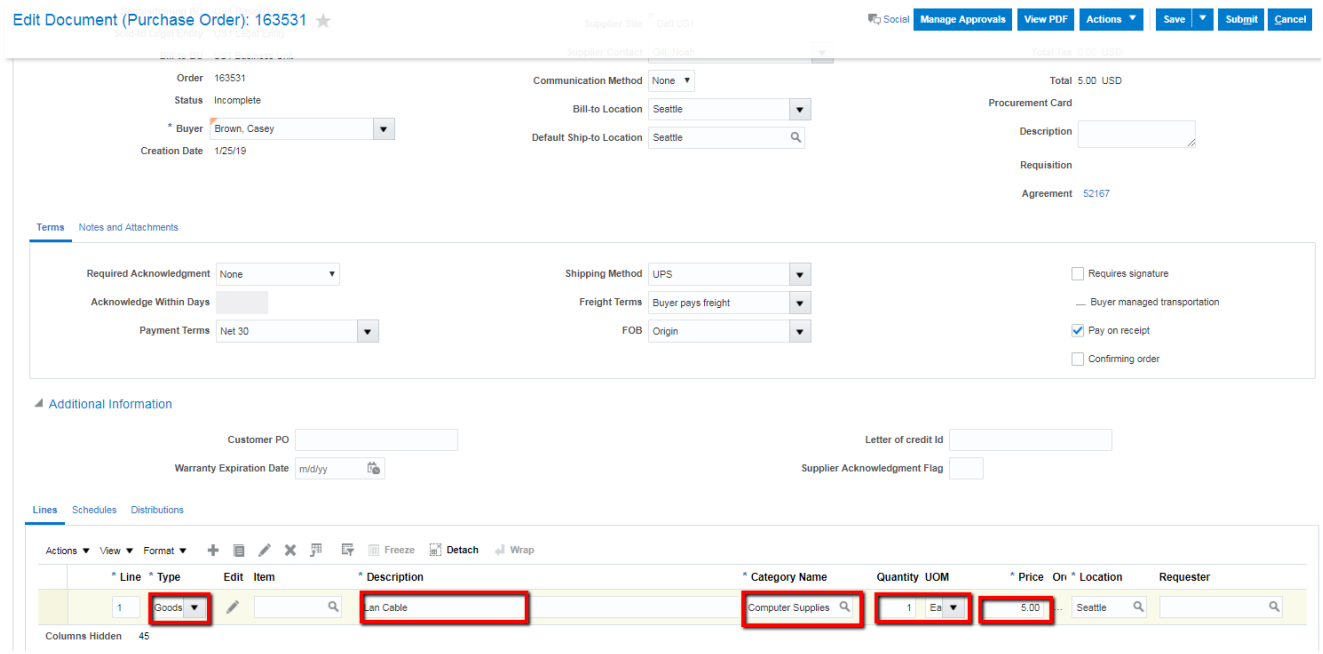
3. Select Tasks tab and Click on Create Order



4. Enter Supplier information (Dell Inc.) and leave the rest to default. Click on Create

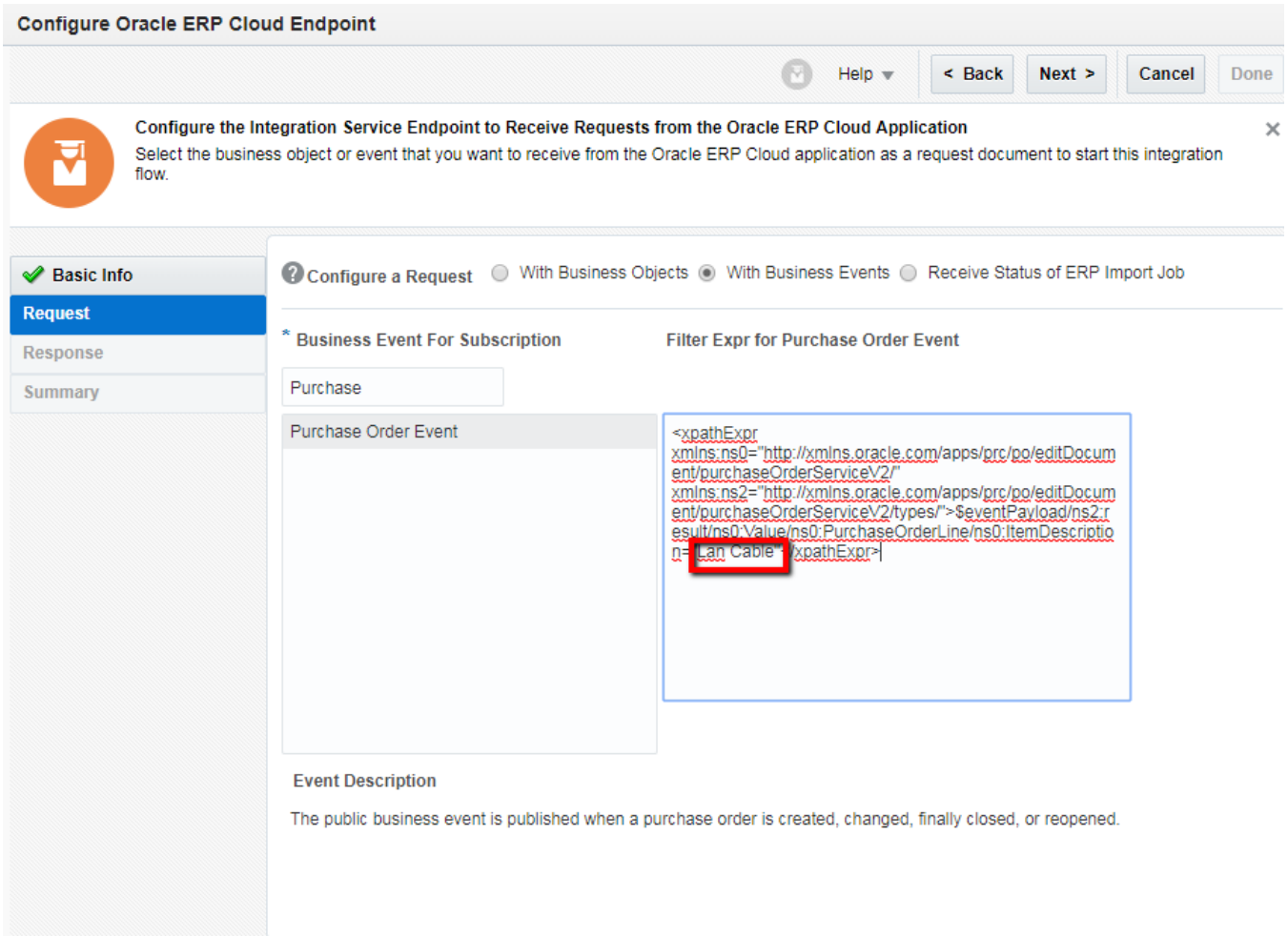


5. In the Purchase Order page go to the Order Lines Section and provide Item information as below

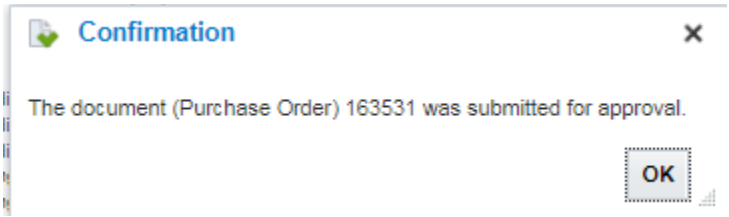


Note: For “Description” enter a Unique Value of your choice, which was provided in the xpath expression earlier when configuring the ERP adapter PO Event

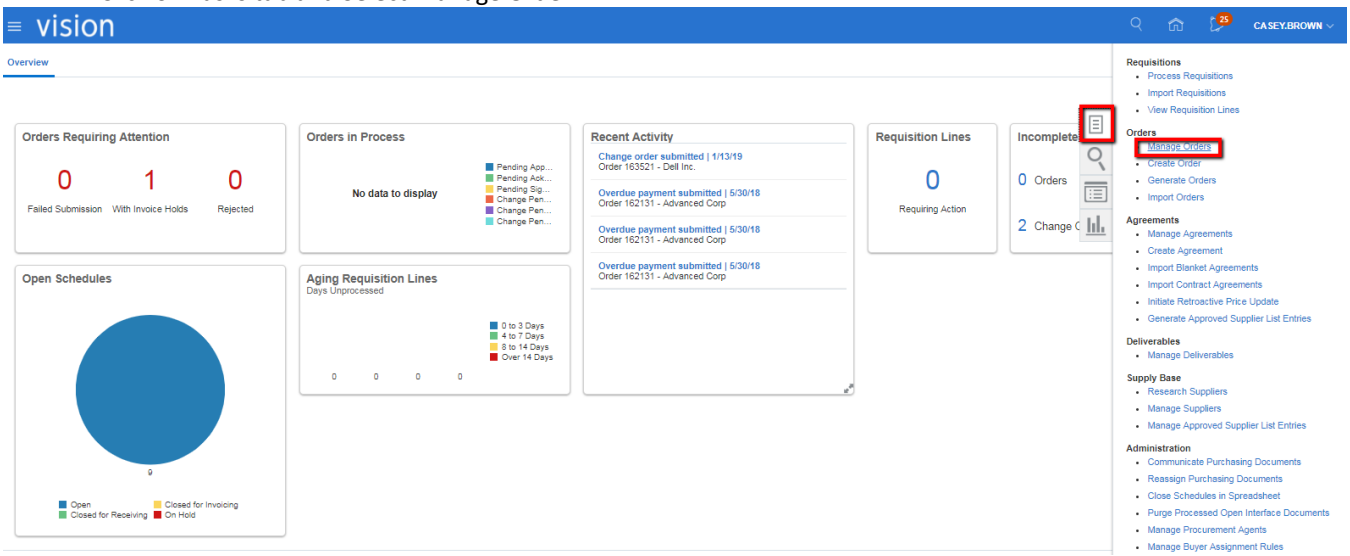
Ref:



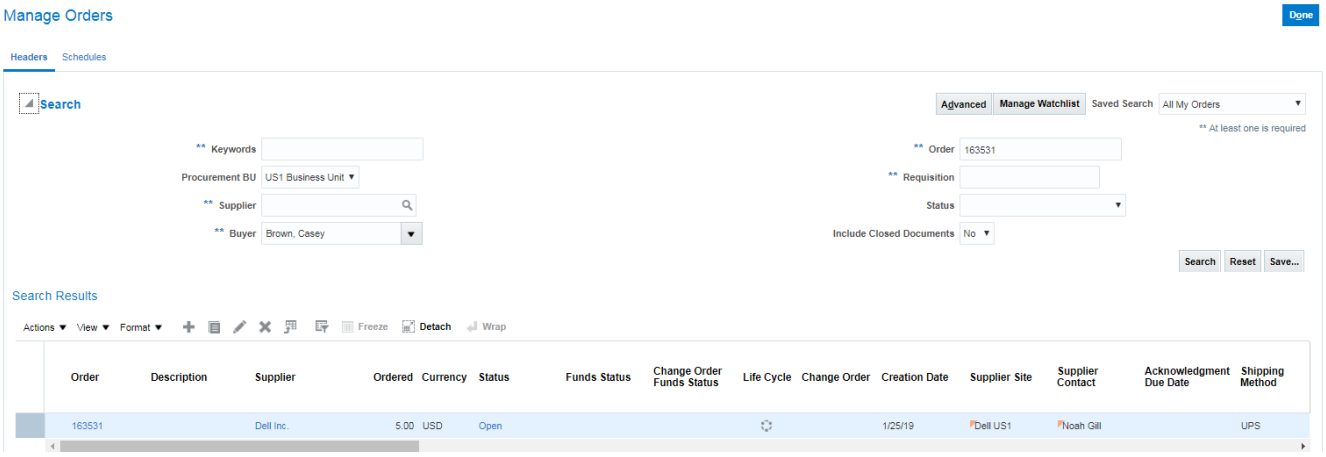
6. Click on Submit to Create a Purchase Order. Make a note of the Order Number



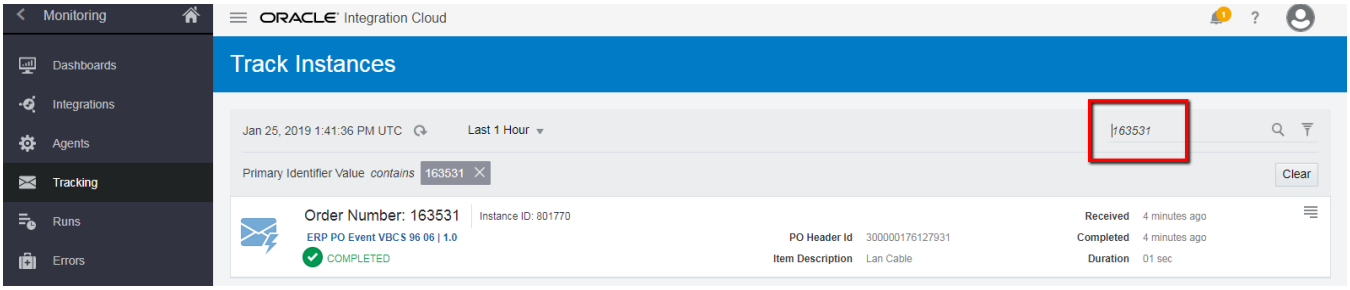
7. Click on Tasks tab and Select Manage Order



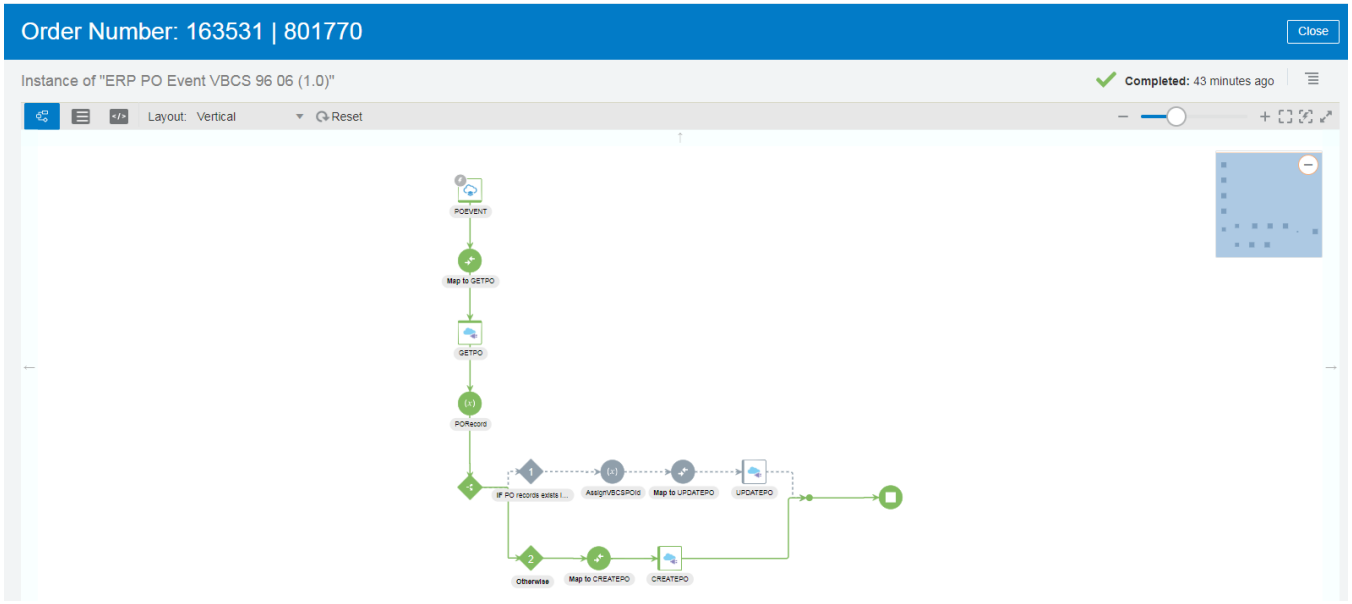
8. Search for the Order Number and wait for the Status field to change to “Open”



9. Go back to Oracle Integration -> Monitoring -> Tracking Page and Search for your instance with the Order Number as Tracking identifier

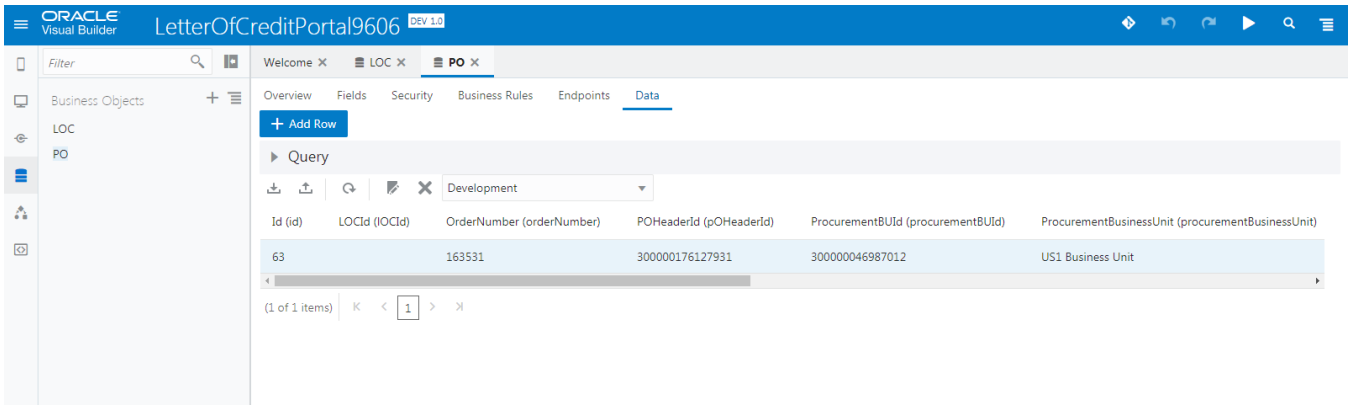


10. Click on the instance and verify that the Flow is completed successfully

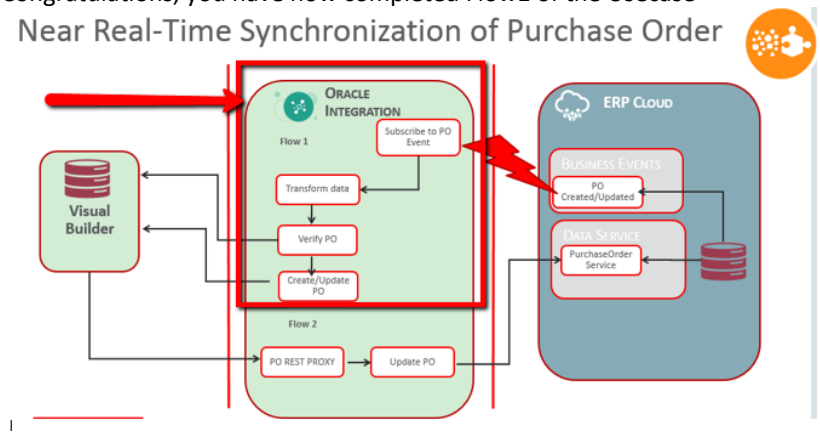


Since it is a new PO record which does not exist in VBCS "Otherwise" flow path is chosen based on the condition

11. Navigate to Visual Builder and Click on imported application
12. Select the Business Objects Tab and click on "PO" object you should see a new record is created



Congratulations, you have now completed Flow1 of the Usecase



You leveraged rich capabilities of Oracle Integration such as ERP Adapter Event Subscription Capabilities using and App-driven (trigger-based) integration, ERP Cloud adapter, Rest adapter, Data Mapper, Actions such as Invoke and Actvities such as Assign, Map, If-Otherwise etc, Configuring Business Tracking Identifiers and monitoring running flows.

You could now leverage this knowledge to design, activate and monitor several use cases for ERP Real time Synchronization

Creating Connections (Flow2)

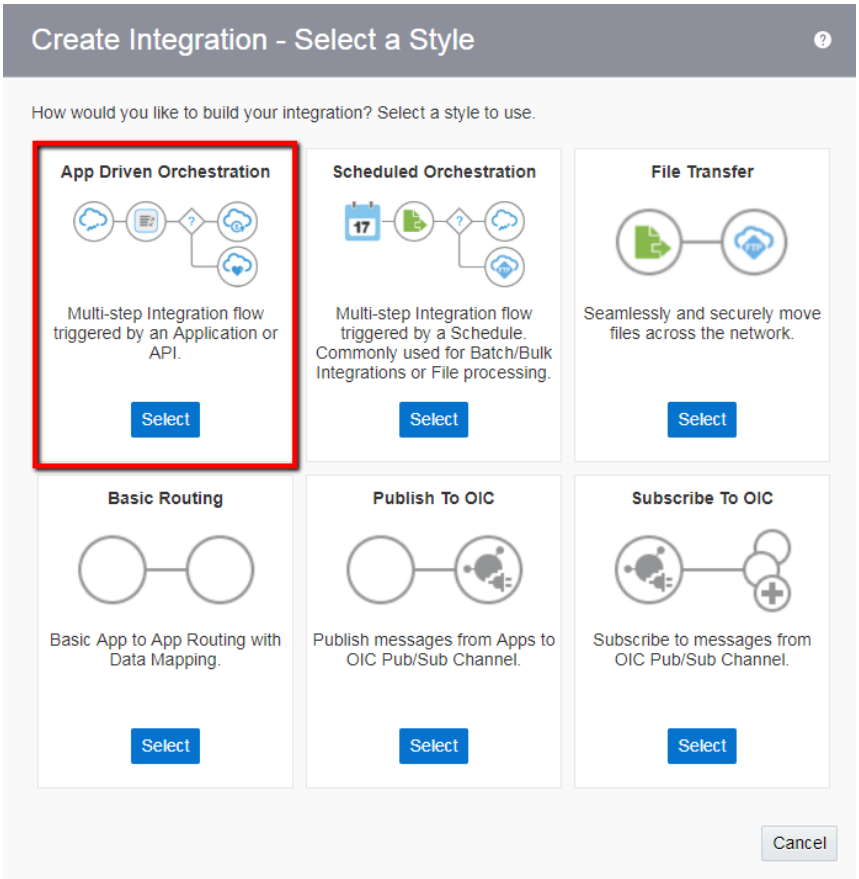
The following Connections have been created and configured. You will be using these connections for creating Integration flow

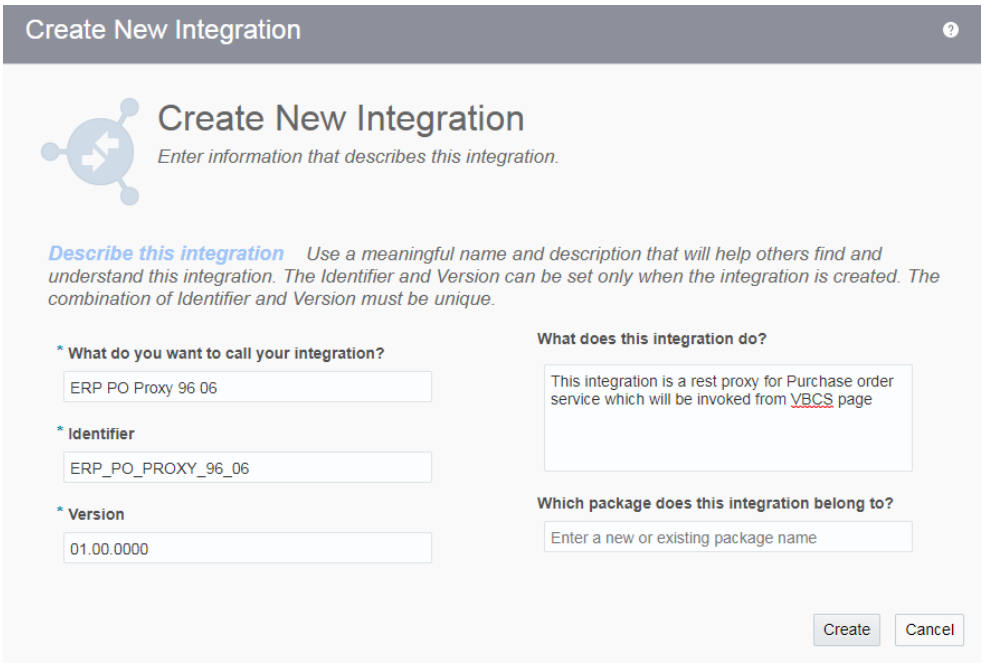
Connection Name	Connection Type
PO REST Interface Con 96 06	Rest Adapter
ERP Conn 96 06	ERP Adapter

Creating the PO Proxy Integration (Flow2)

1. On the Oracle Integration home page, click **Integrations**.
2. On the Integrations page, click **Create**. The Create Integration - Select a Style/Pattern dialog is displayed.
3. Select **App Driven Orchestration** type of integration. The **Create New** Integration dialog is displayed.
4. Enter the following information:

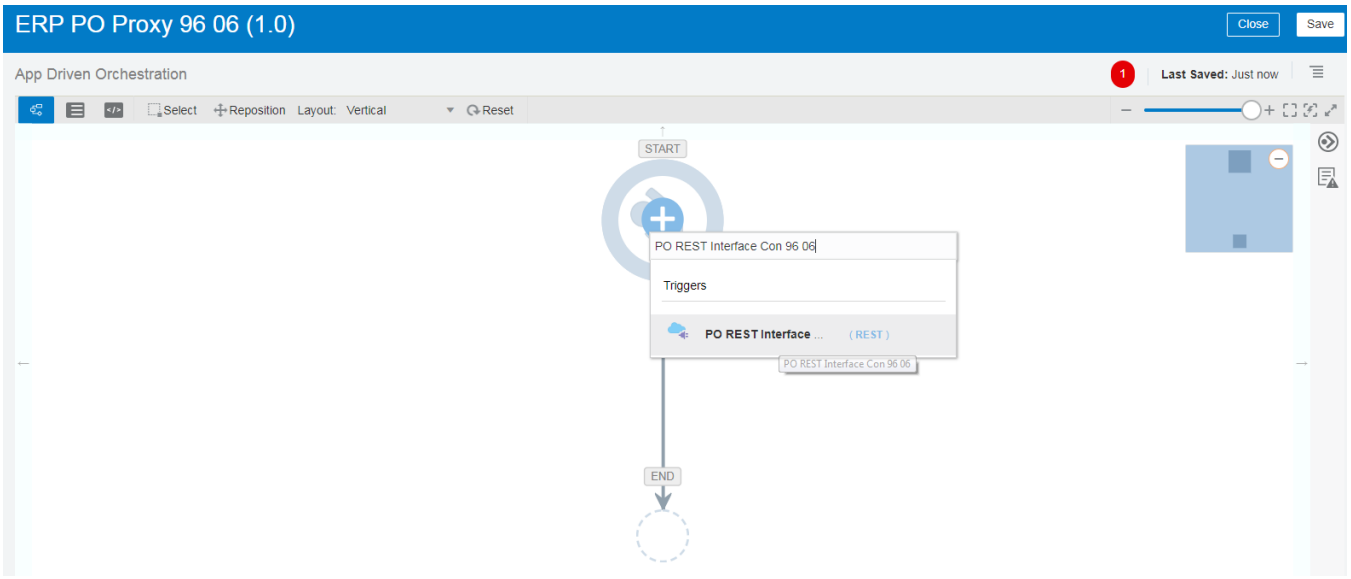
Field Element	Value
What do you want to call your integration?	ERP PO Proxy <ClassId> <StudentId> Ex: ERP PO Proxy 96 06
Identifier	Accept the default identifier value. The identifier is the same as the integration name you provided, but in upper case.
Version	Accept the default version number of `01.00.0000`. Or, if you want to change the version number, enter the version using numbers only in this format: `xx.xx.xxxx`.
What does this integration do?	This integration demonstrates the use of Oracle Integration REST adapter and ERP Cloud Adapter to create a REST to SOAP proxy for ERP Cloud webservices
Which package does this integration belong to?	*Leave blank*



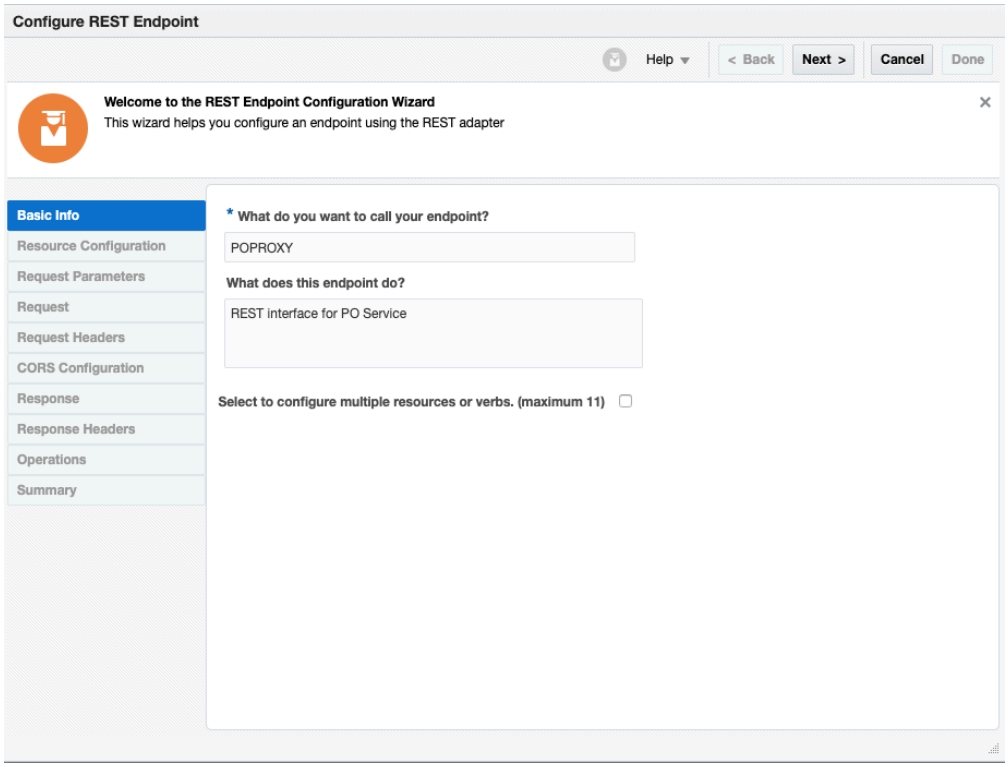


Click **Create**. The integration canvas is displayed

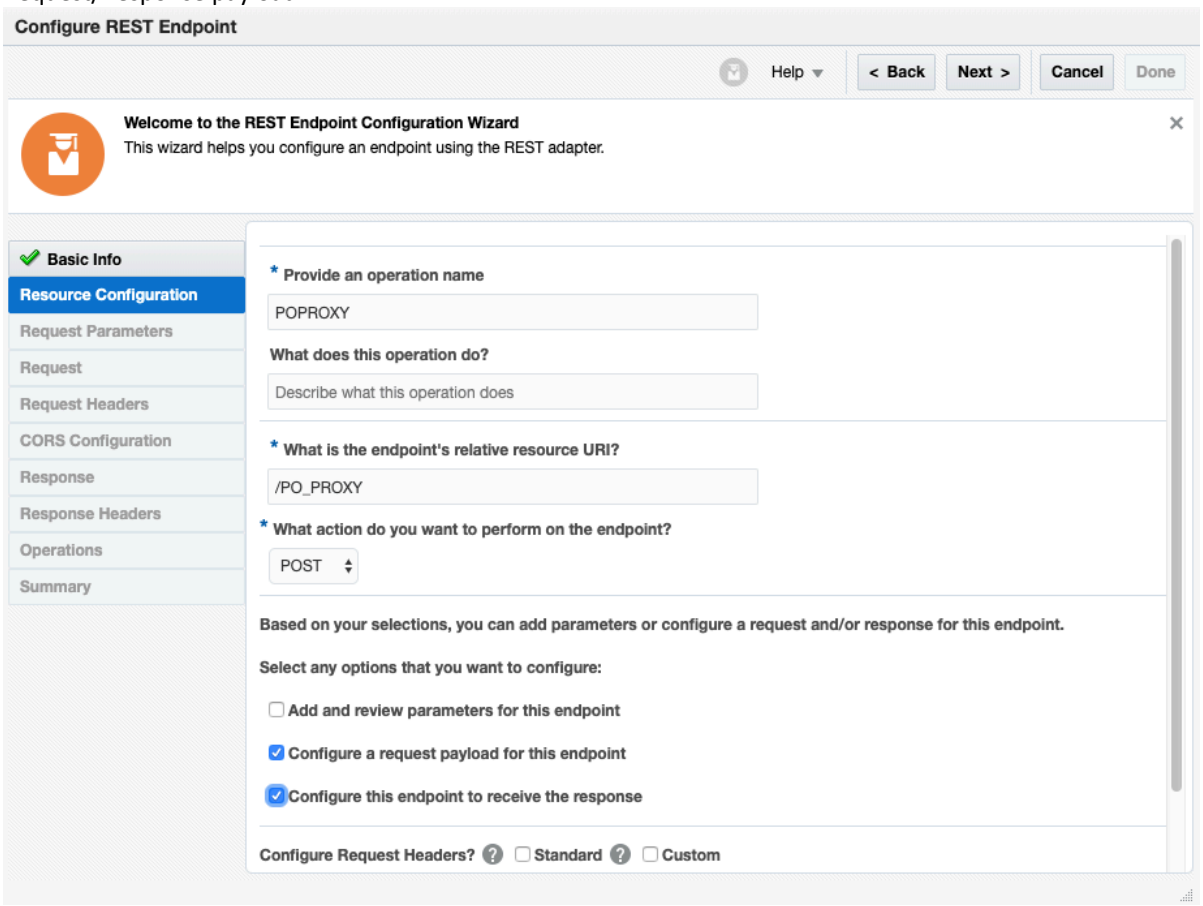
5. Hover over the circle next to Start, and click on the + sign
6. Select the REST Connection (PO REST Interface Con 96 06) from the list which is pre created for you
7. Enter details as in the screenshot below to define the endpoint in the flow



8. In the Basic info page provide the endpoint name and description. Click Next



9. In the Resource Configuration page provide the operation name, URI, and HTTP verb, and select options for Request/Response payload.



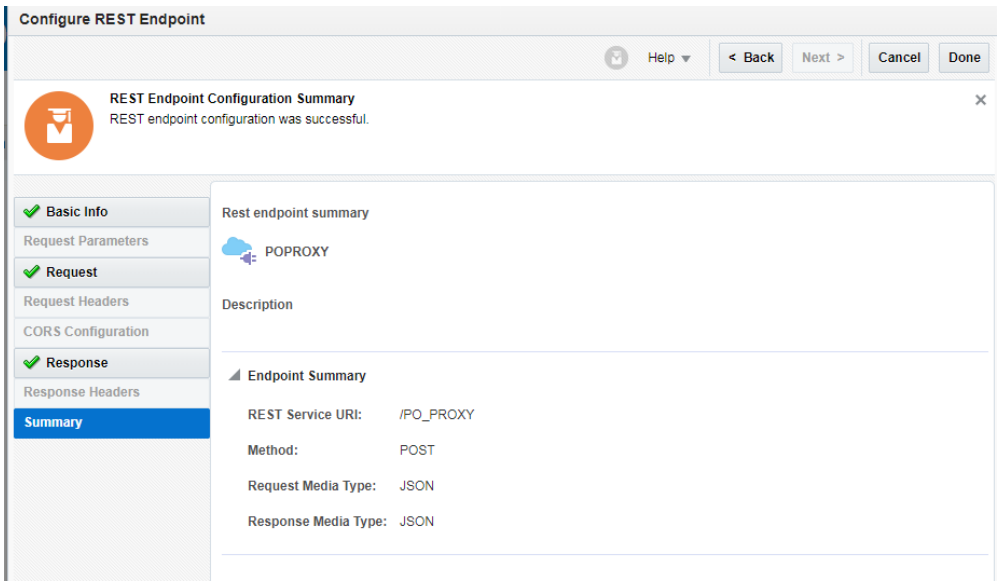
10. In the Request page Select Request payload format as “JSON Sample” and provide the sample JSON below by clicking on the inline link


```
{
  "id": 24,
  "lOCId": 3,
  "orderNumber": "163521",
  "pOHeaderId": "300000074157561",
  "procurementBUId": "300000046987012",
  "procurementBusinessUnit": "US1 Business Unit",
  "soldToLegalEntity": "US1 Legal Entity",
  "supplier": "Dell.",
  "supplierId": "300000047414679"
}
```

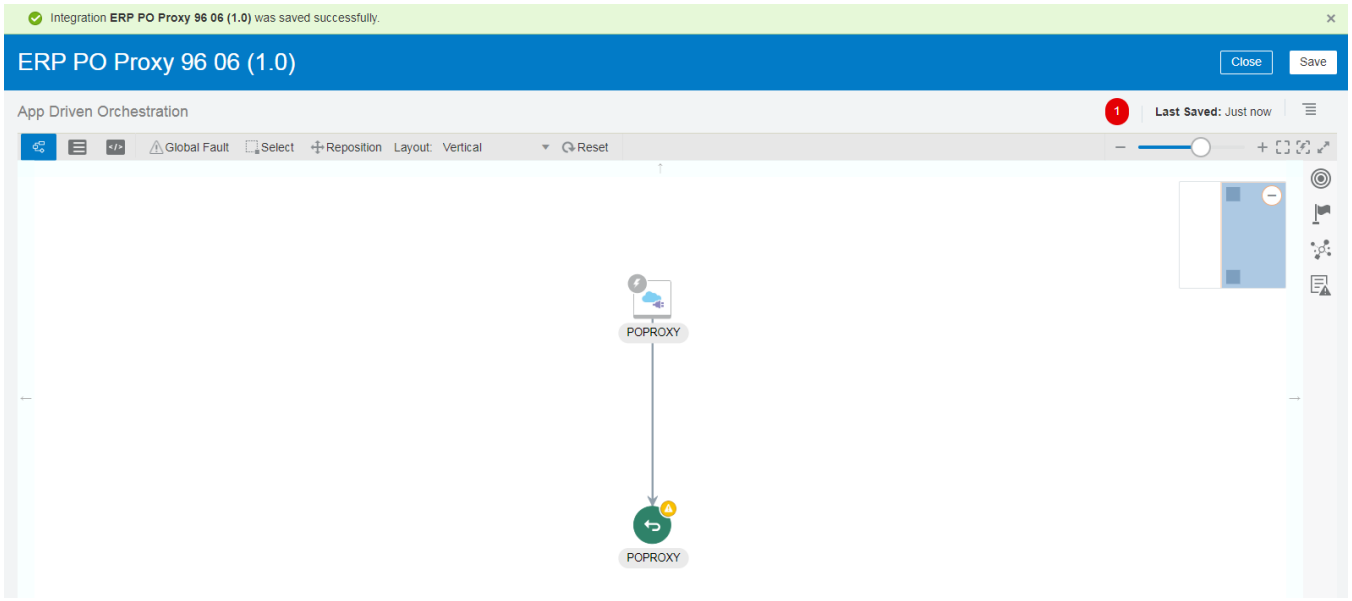

11. In the Response page Select Response payload format as “JSON Sample” and provide the sample JSON below by clicking on the inline link


```
{
"pOHeaderId":"300000074157561",
"orderNumber":"162180",
"soldToLegalEntityId":"300000074157561",
"changeOrderNumber":3,
"requestStatus":"SUCCESS"
}
```

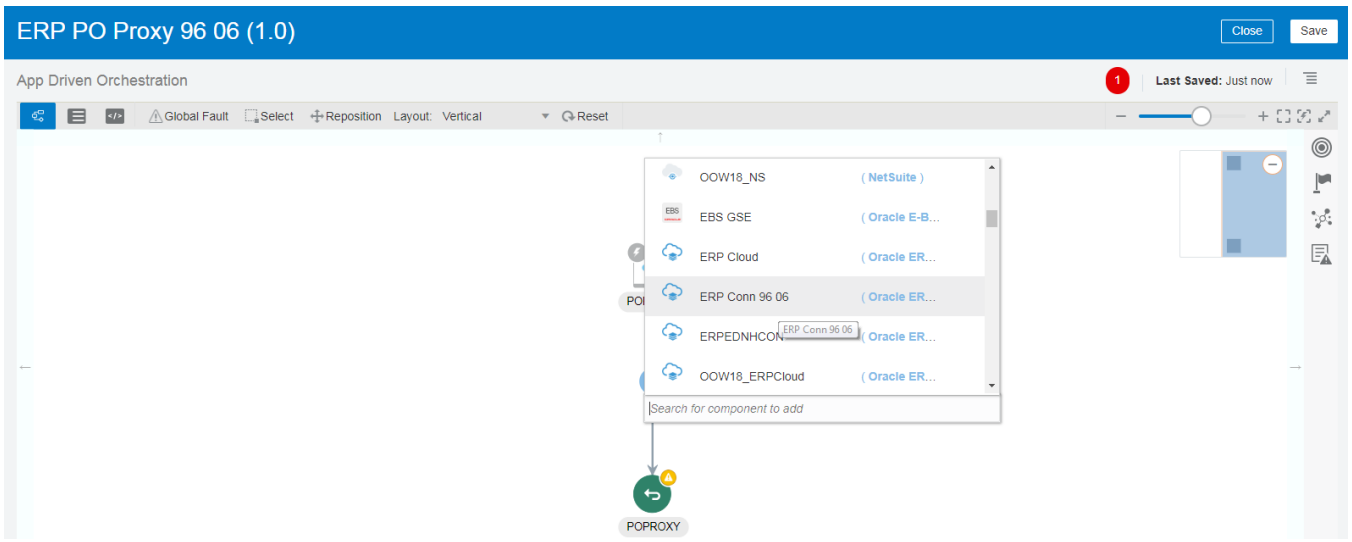

12. Review the Summary page and click on Done



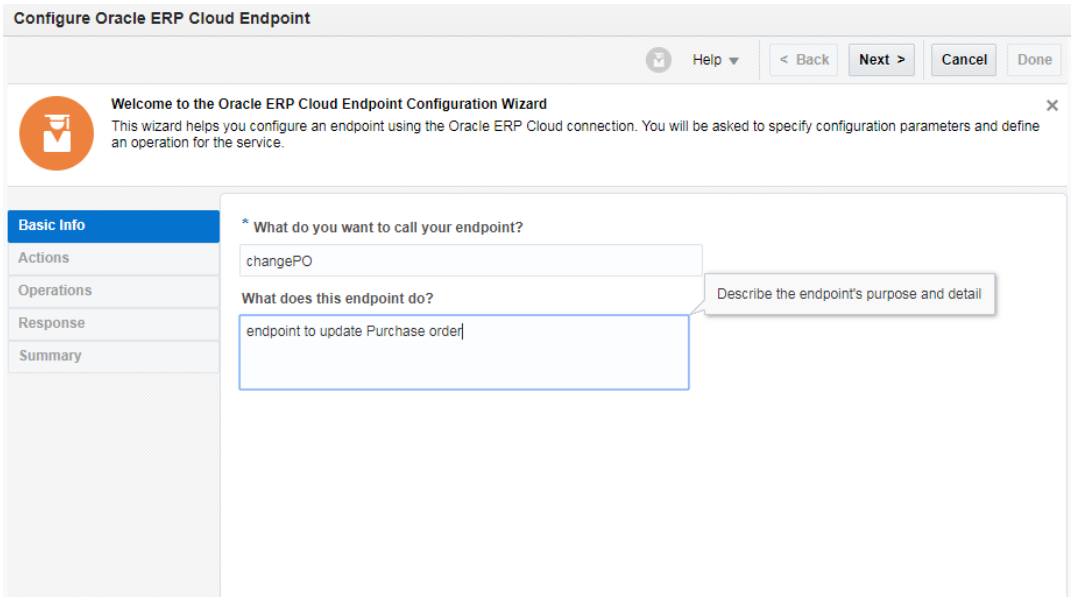
A Request/Response Flow is created. Delete the “Map to POPROXY” Action



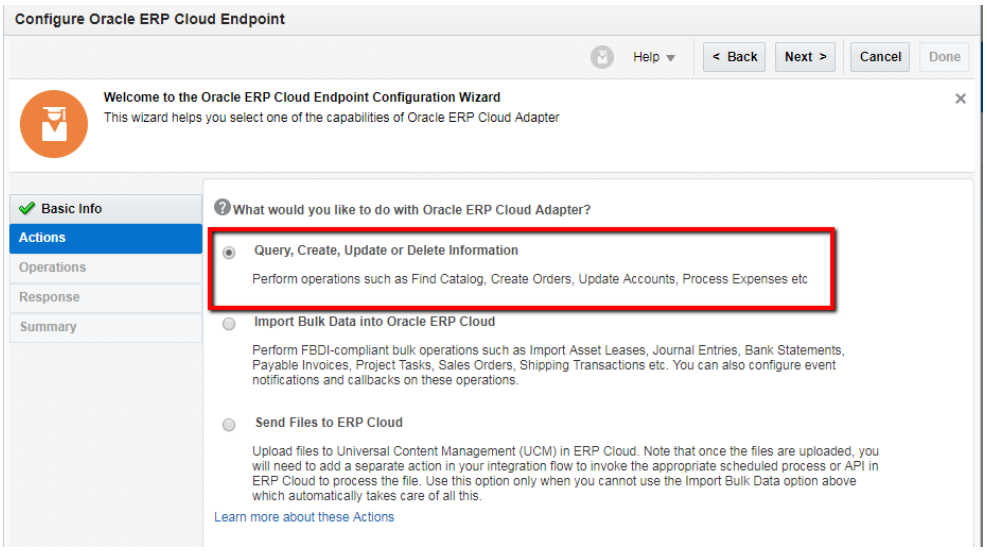
13. Hover on the wiring next to POPROXY Action and Click on “+” sign and add the “ERP Conn 96 06” connection which is pre created



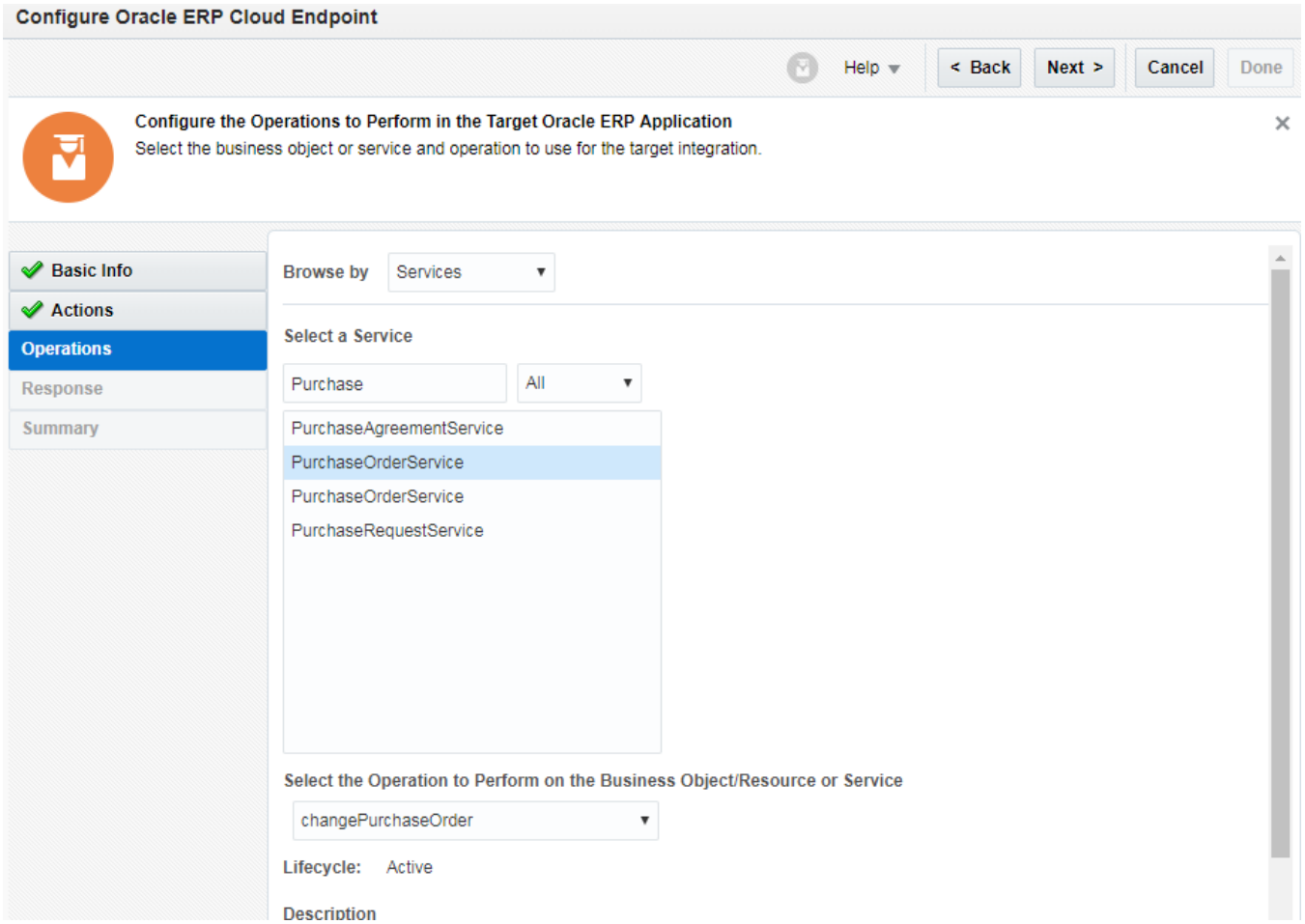
14. In the Basic info page provide endpoint name , endpoint description and Click Next



15. In the Actions Page, Select the Radio Button “Query, Create, Update or Delete Information” to consume Purchase Order V2 Service

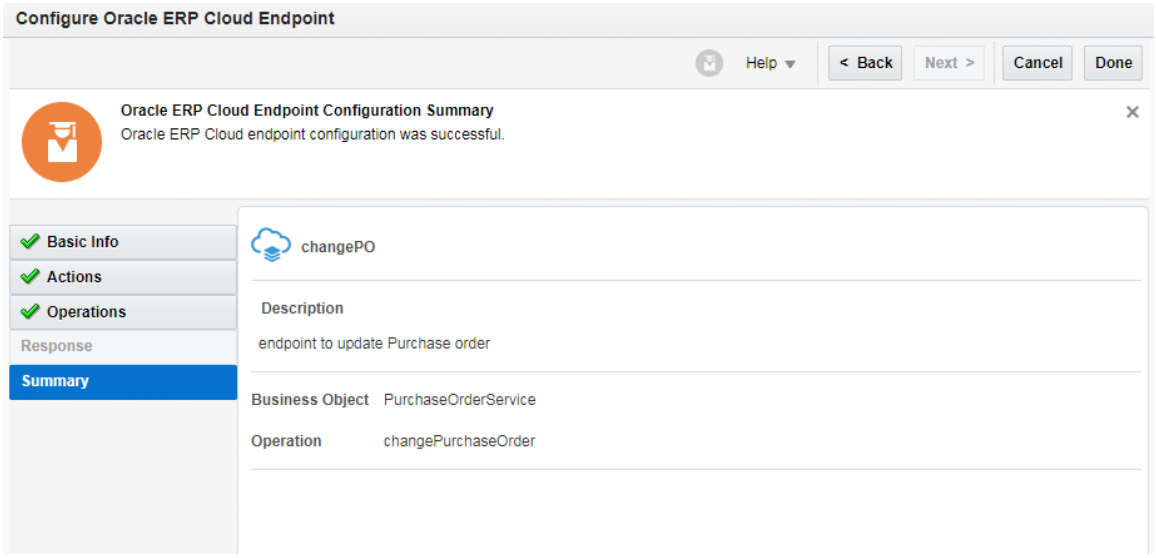


16. In the Operations Page Select Browse By -> Services and Search for Purchase Order.
Select PurchaseOrderService and changePurchaseOrder operation to consume in our flow.
Note: Select the correct PurchaseOrderService which has “acknowledgePurchaseOrder” in the list of operations

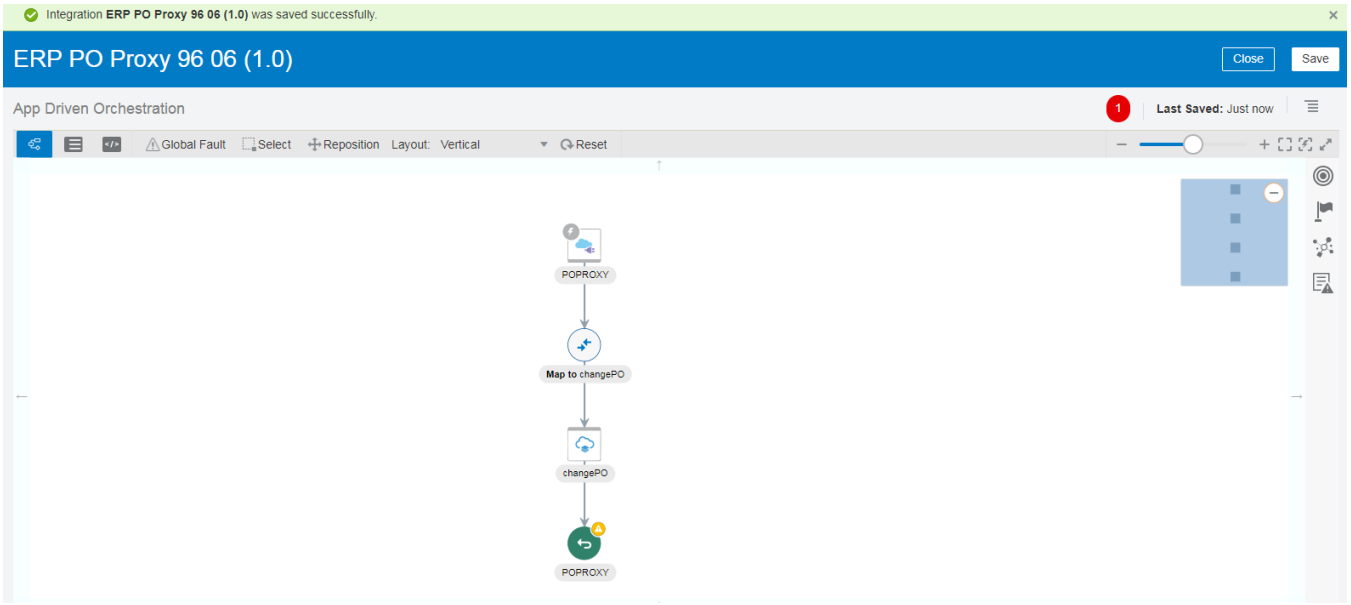


Click Next

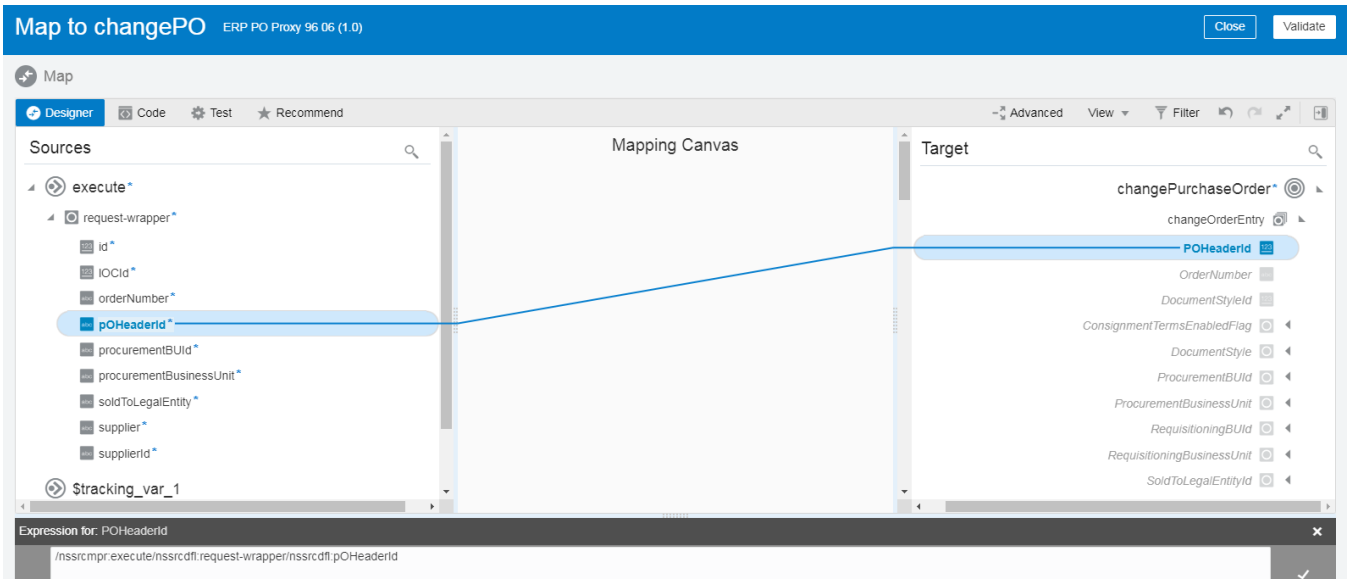
17. Review the Summary Page and Click Done



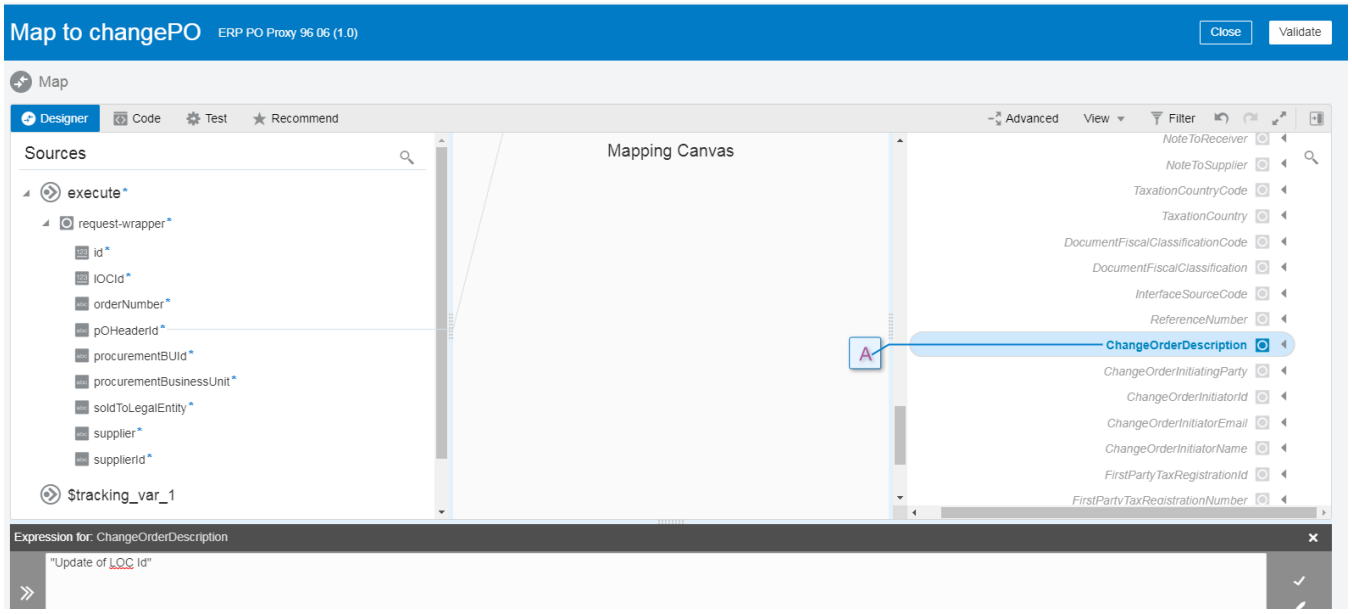
18. An invoke Action is configured with changePO operation and an empty Map (Map to changePO) Action is created



19. Edit the Map (Map to changePO) Action and provide below mapping

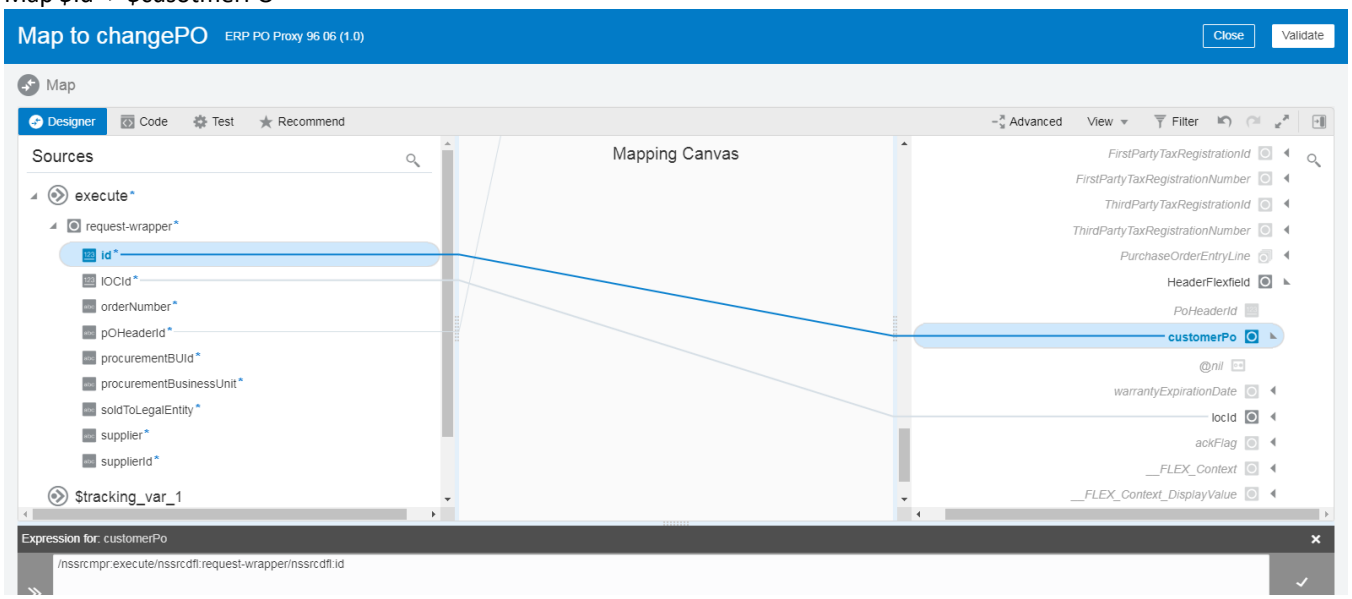


Select the element changeOrderEntry -> ChangeOrderDescription which opens up an expression window. Enter “Update of LOCId”

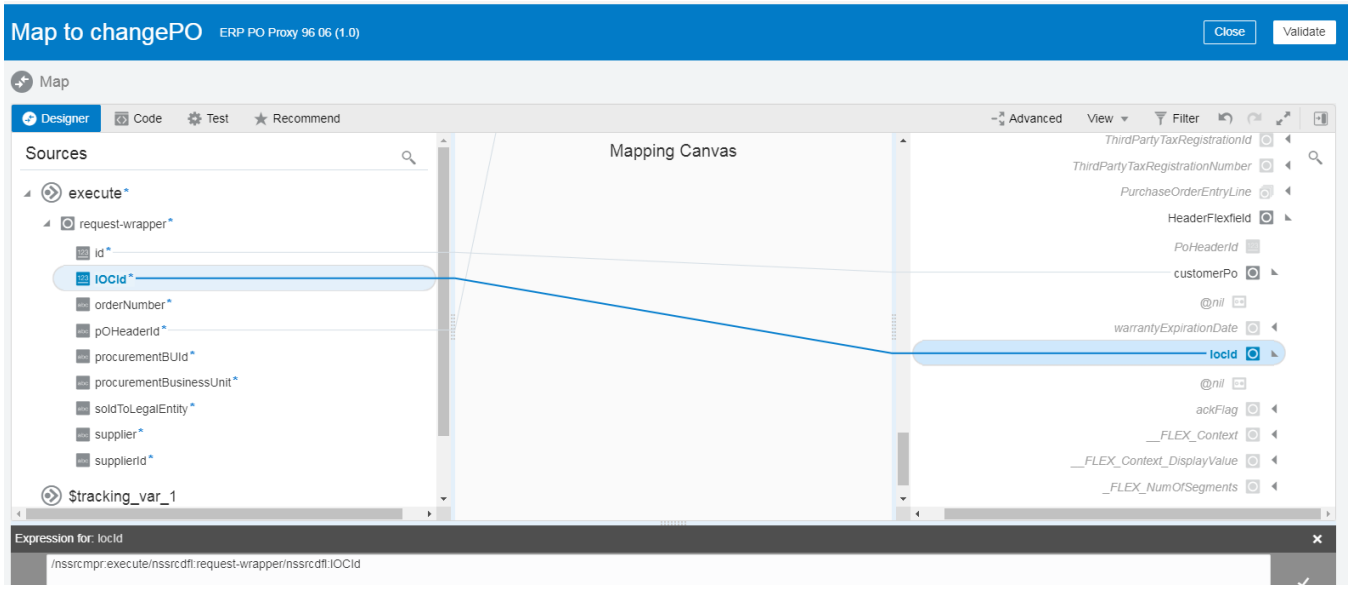


Expand “HeaderFlexField” element and map the following fields from Source to Target

Map $Id -> $cusotmerPO

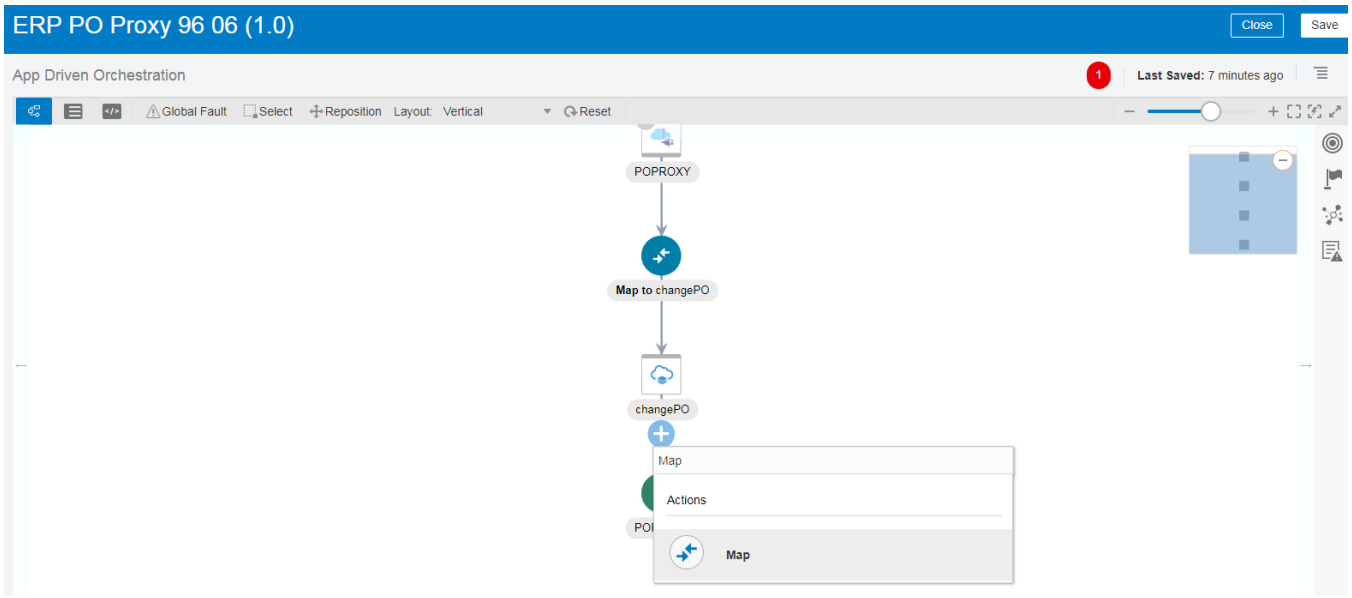


Map lOCId -> locId



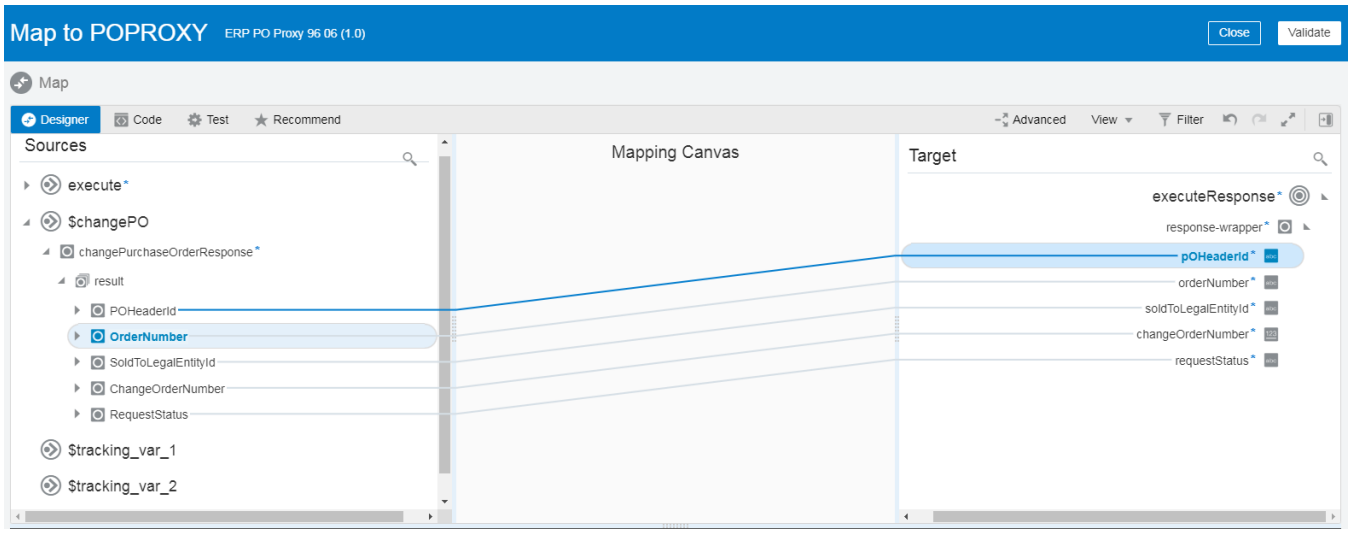
Validate and Save your integration

20. Hover on the wiring next to the changePO invoke Action and Click + sign to add a Map Action



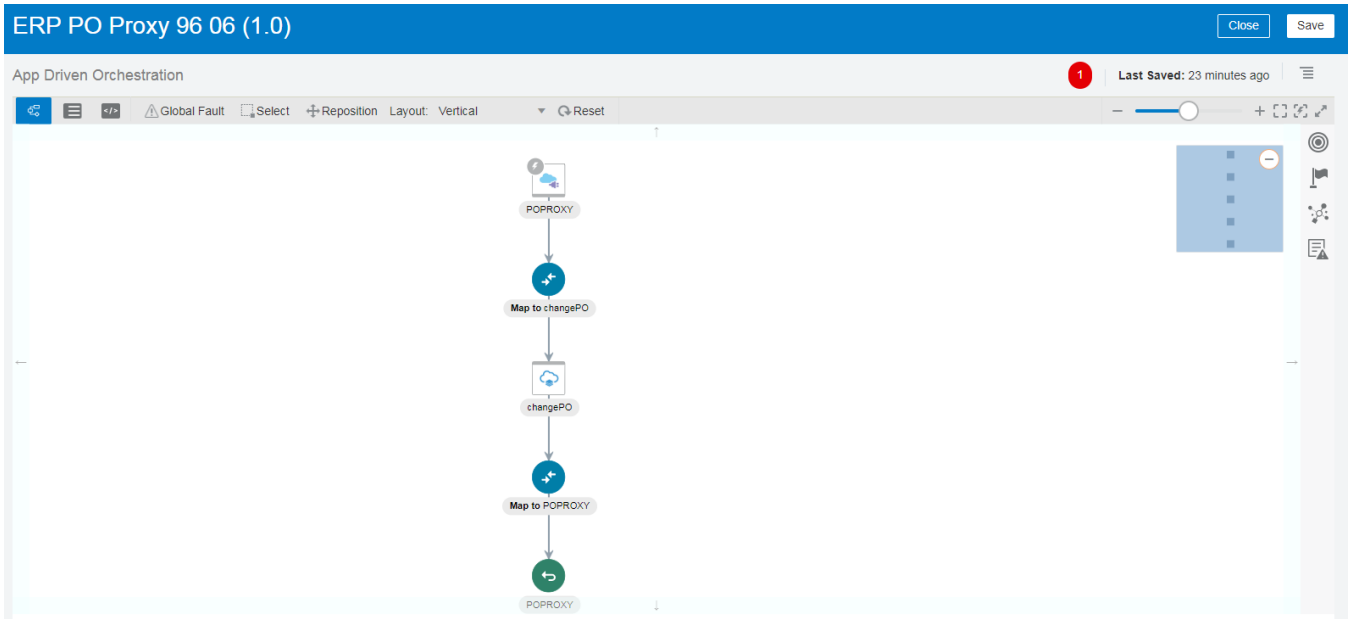
21. Edit the “Map to POProxy” Action and perform the mapping as per below

changePurchaseOrderResponse -> result->POHeaderId **TO** response-wrapper -> poHeaderId
changePurchaseOrderResponse -> result->OrderNumber **TO** response-wrapper -> orderNumber
changePurchaseOrderResponse -> result->SoldtoLegalEntityId **TO** response-wrapper -> soldToLegalEntityId
changePurchaseOrderResponse -> result->ChangeOrderNumber **TO** response-wrapper -> changeOrderNumber
changePurchaseOrderResponse -> result->RequestStatus **TO** response-wrapper -> requestStatus

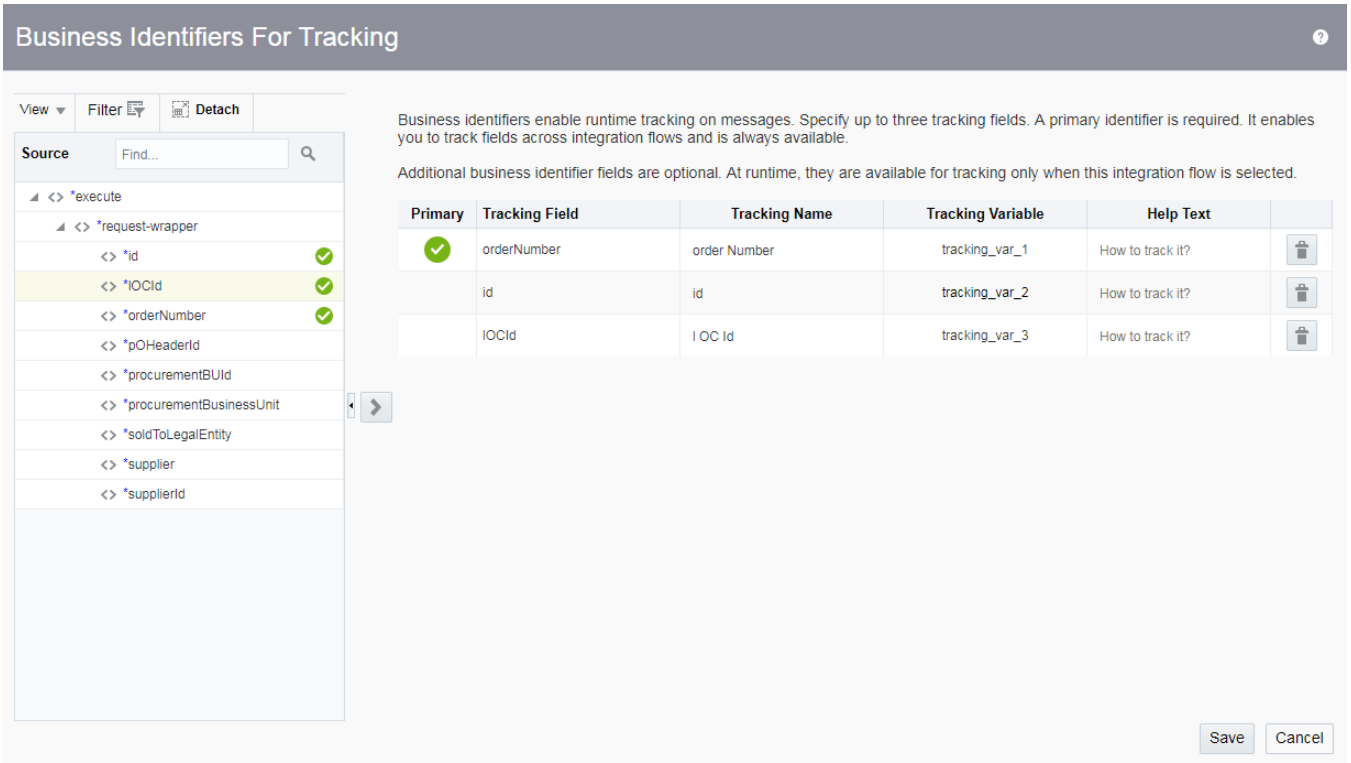


Click on Validate and Close

22. Your Final integration flow…



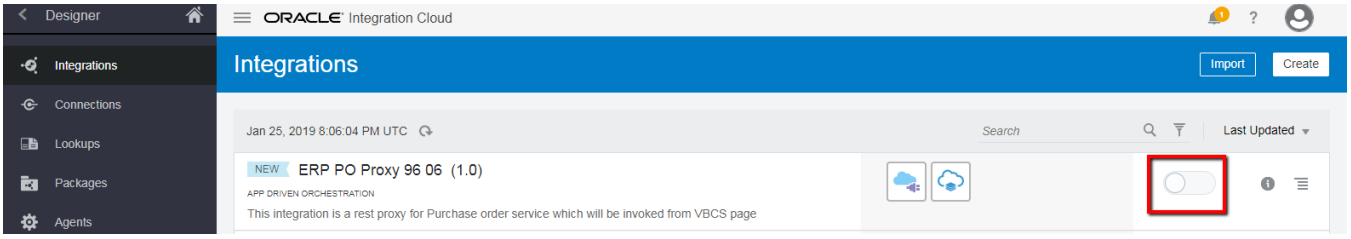
23. Click on Top right Corner and select Tracking. Add the below Business Identifiers for Tracking your instance

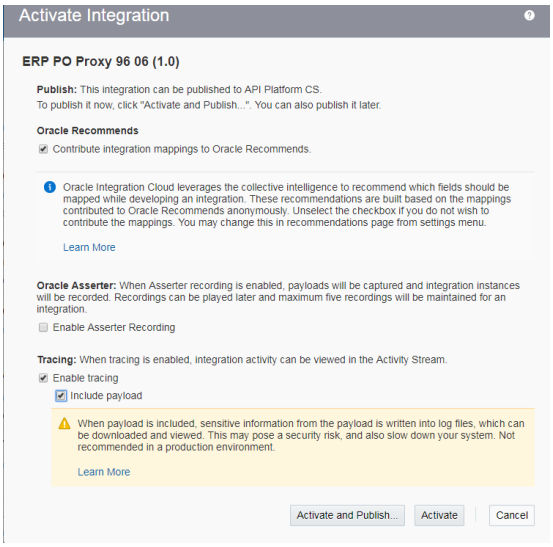


Click on Save.

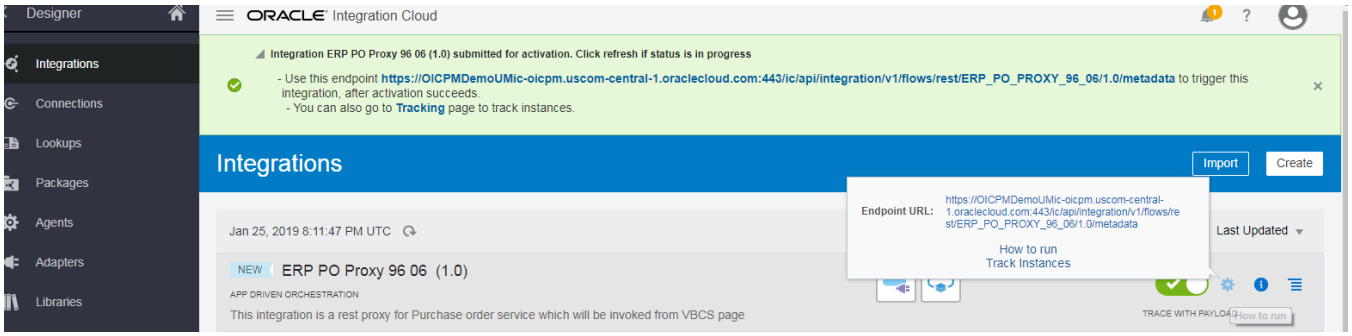
Activate Integration (Flow2)

1. On the Integrations page, click on the "*ERP PO Proxy <ClassId> <StudentId>"* flow using the slider button and Activate the Integration





2. Click on How to run next to the Activation bar



Open the metadata url generated in a browser window.
This metadata url provides all the description about your REST Endpoint

Endpoint Description

Endpoint URL

https://OICPMDemoUMic-oicpm.uscom-central-1.oraclecloud.com:443/ic/api/integration/v1/flows/rest/ERP_PO_PROXY_96_06/1.0/PO_PROXY

Swagger

https://OICPMDemoUMic-oicpm.uscom-central-1.oraclecloud.com:443/ic/api/integration/v1/flows/rest/ERP_PO_PROXY_96_06/1.0/metadata/swagger

How to Run

http://www.oracle.com/pls/topic/lookup?ctx=oic_en&id=ICSUG-GUID-205B916C-1075-4603-A9E2-72A6C8C4AB3C

Resource /PO_PROXY

Method POST

Request

Request Media Type

- application/json

Request sample

{ "id": 24, "lOCId": 3, "orderNumber": "163521", "pOHeaderId": "300000074157561", "procurementBUId": "300000046987012", "procurementBusinessUnit": "US1 Business Unit", "soldToLegalEntity": "US1 Legal Entity", "supplier": "Dell.", "supplierId": "300000047414679" }

Response

Response Media Type

- application/json

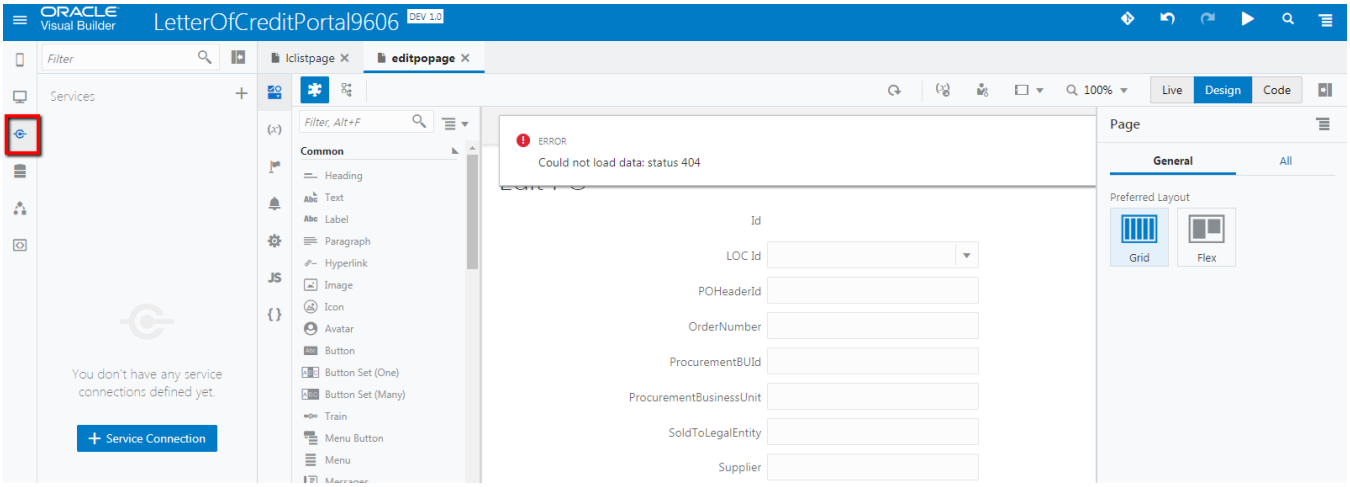
Response sample

{ "pOHeaderId":"300000074157561", "orderNumber":"162180", "soldToLegalEntityId":"300000074157561", "changeOrderNumber":3, "requestStatus":"SUCCESS" }

3. Copy the Swagger url from the Endpoint description. We will use the swagger definition in next section to create a service connection in VBCS Web application

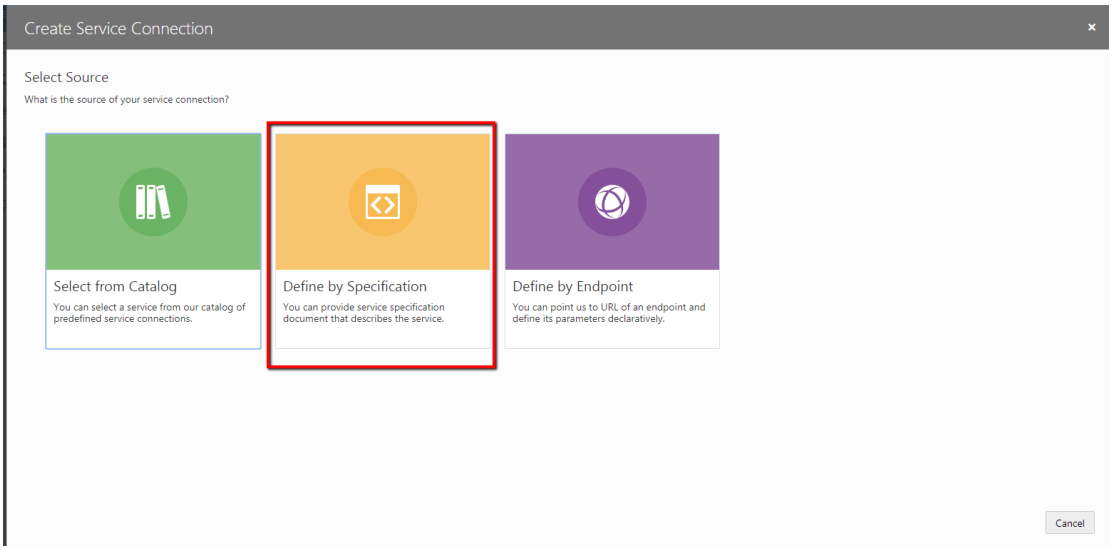
Invoke ERP Cloud Service from VBCS Web App

1. Select the Visual Builder tab, from the list of applications open the **LetterOfCreditPortal<ClassId><StudentId> Web application**
2. On the left hand side select Service Connections tab

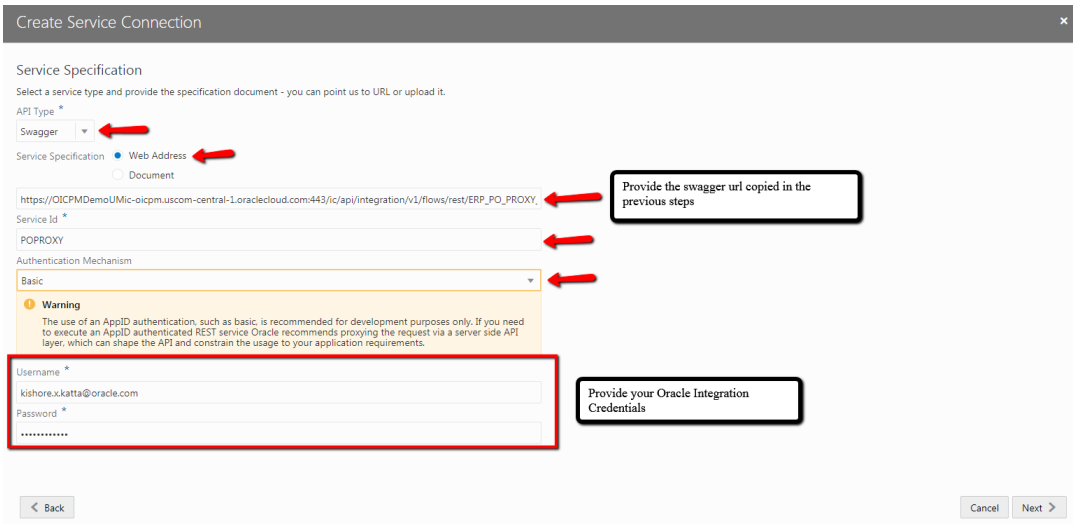


3. Click on the " + Service Connection" to create a new Service Connection to invoke on a button click

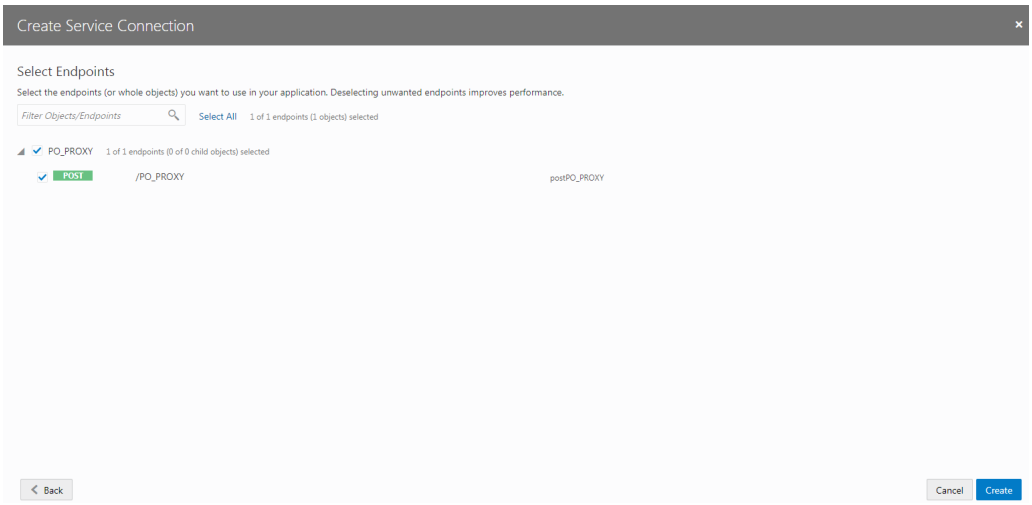
4. In the "Create Service Connection" page select "Define by Specification"



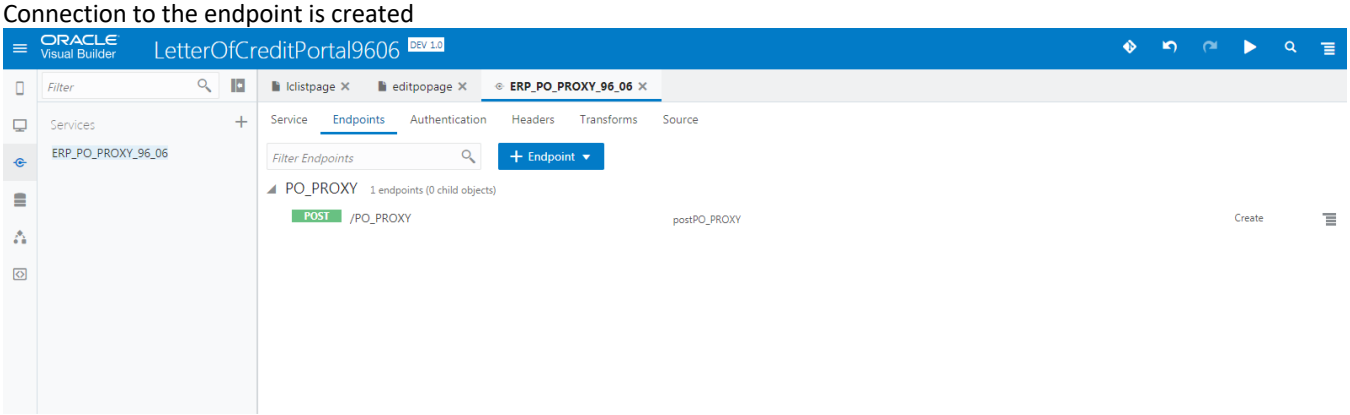
5. Provide the highlighted information as per the screenshot and Click Next



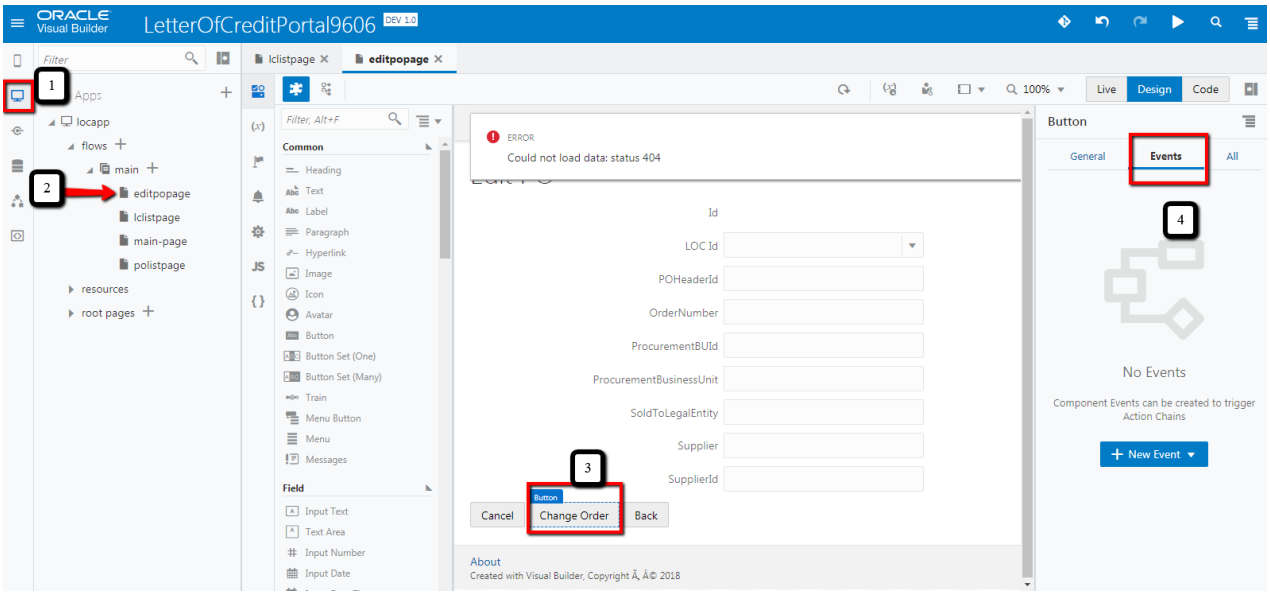
6. In the Select Endpoints page Select the “PO_PROXY” endpoint and click on Create



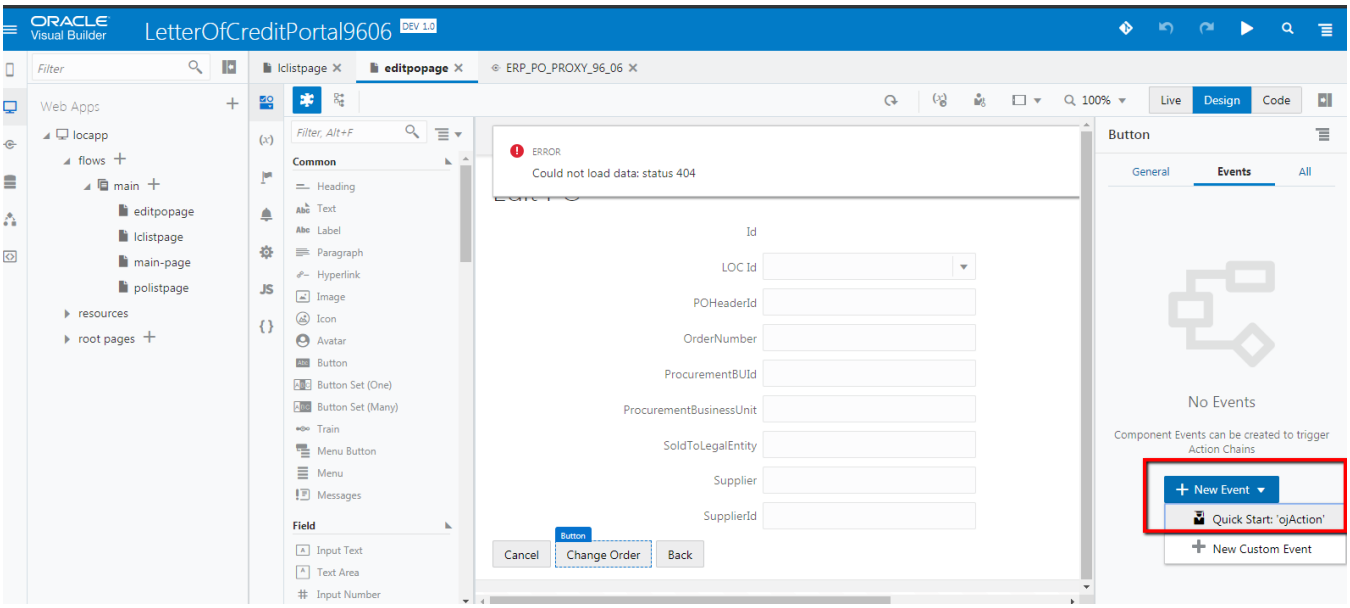
Connection to the endpoint is created



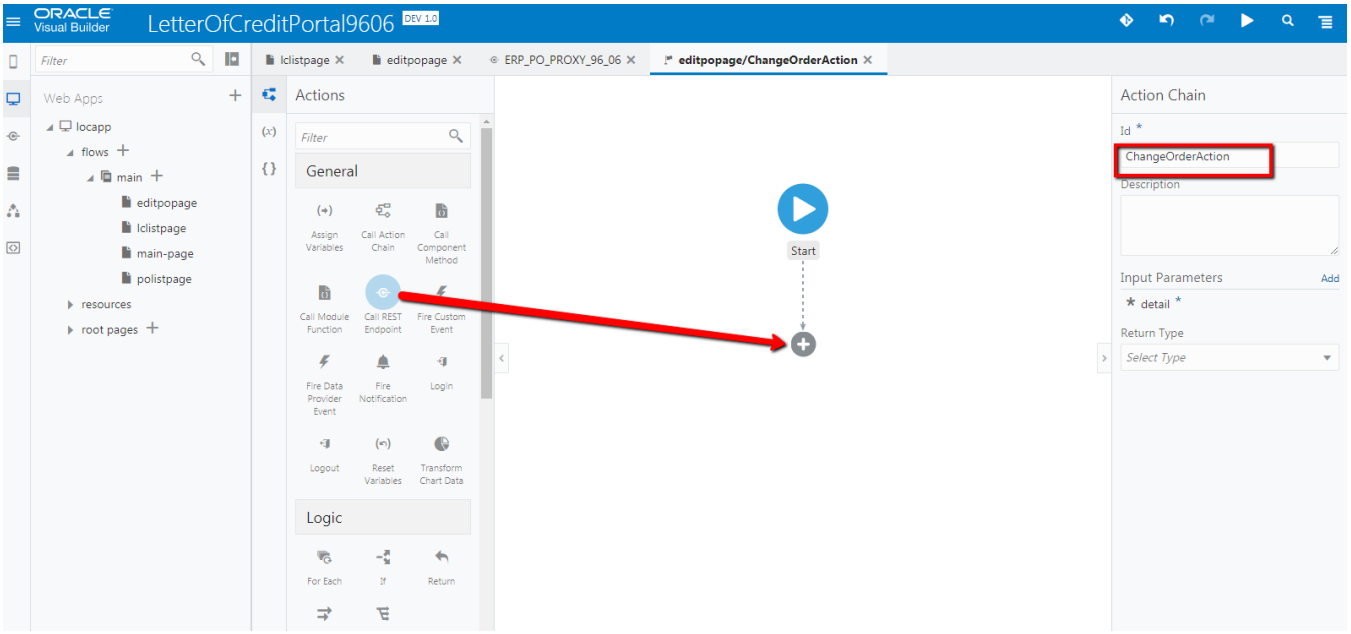
7. (1) Click on Web application tab and (2) select the “editpopage” by expanding the localapp->flows->main. (3) Select the “Change Order” button on the web page. (4) On the right handside select the Events tab

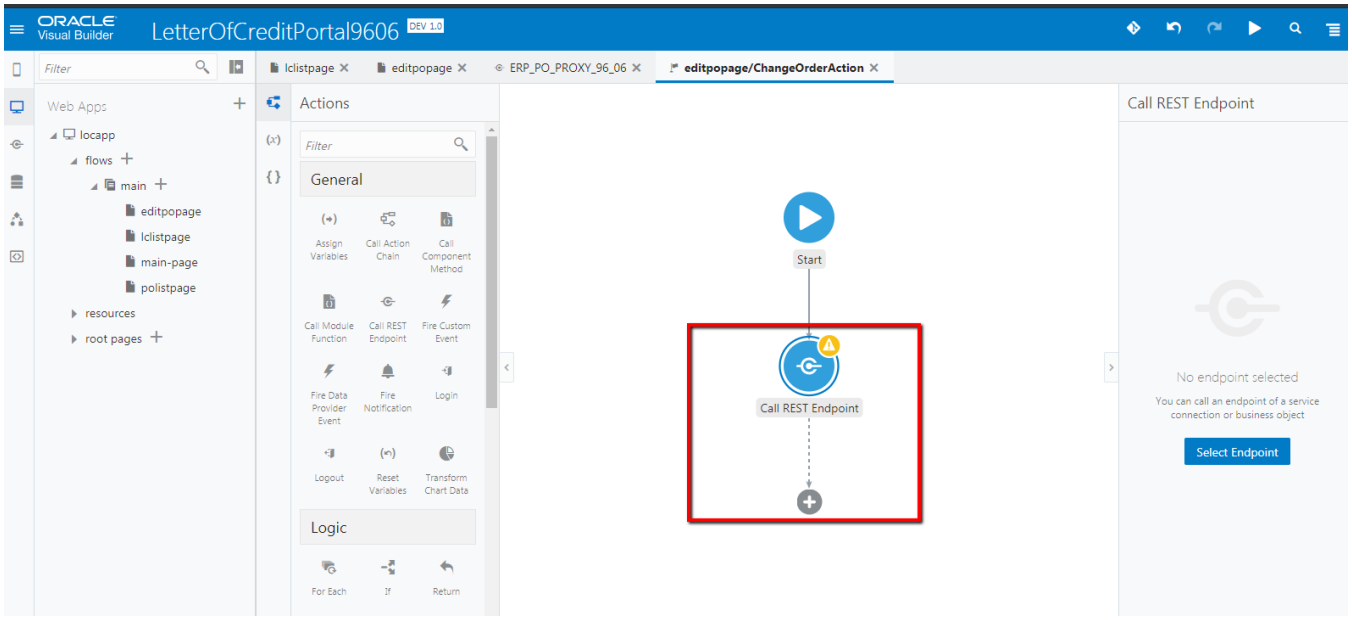


8. Click on New Event and select “Quick Start: ojAction” to create a new Action Chain

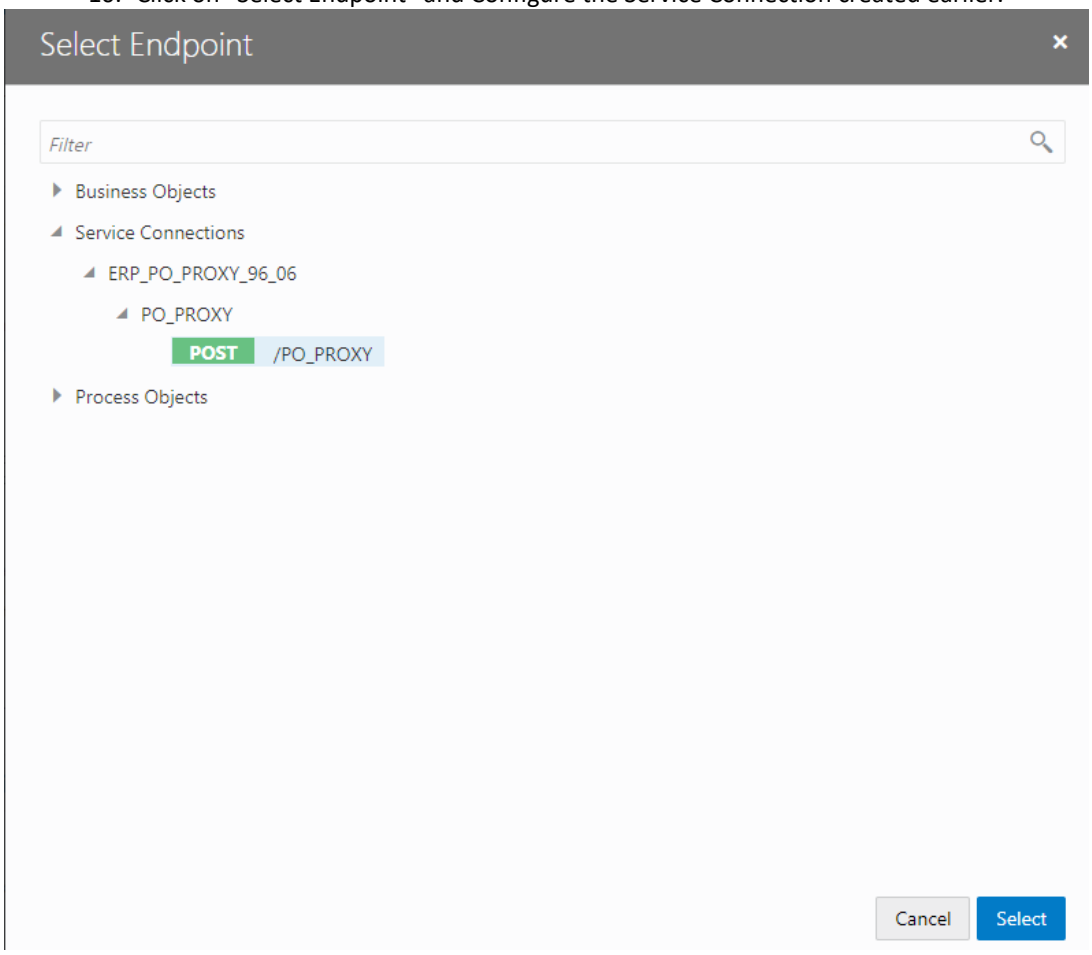


9. Provide Id as “ChangeOrderAction”. Drag and drop “Call REST Endpoint” action from Actions palette onto to the “+ Sign”



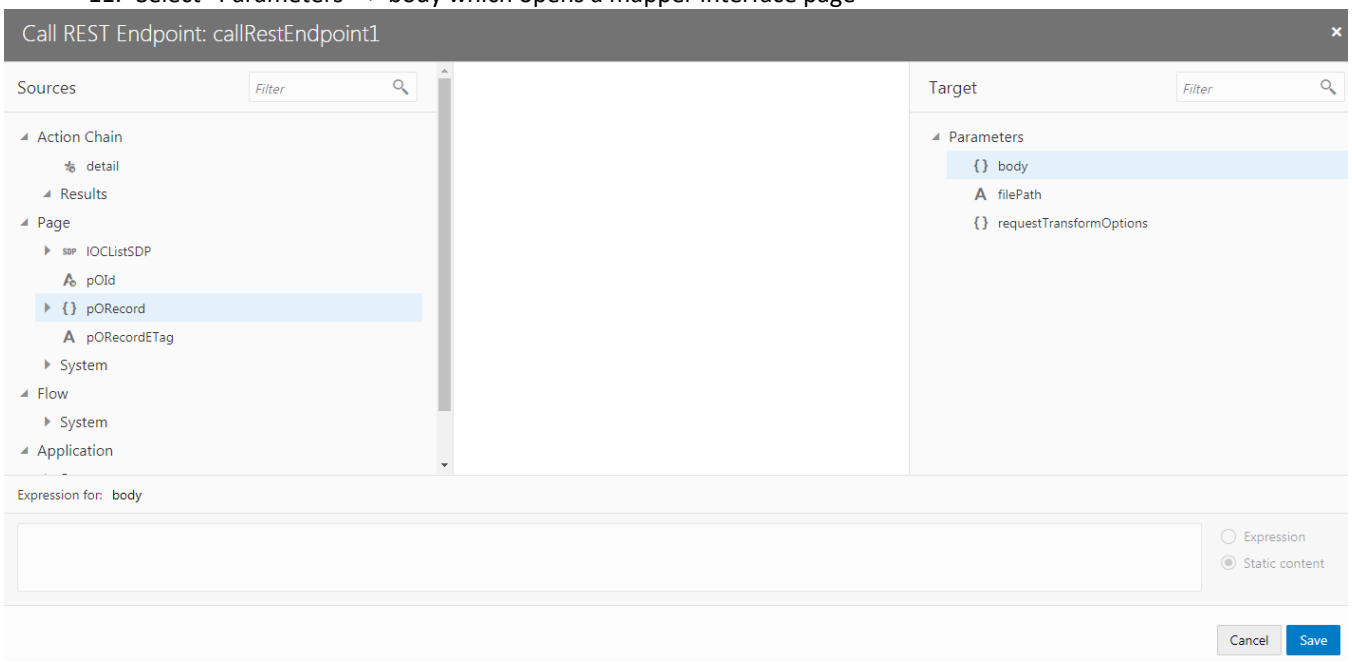


10. Click on “Select Endpoint” and Configure the Service Connection created earlier.



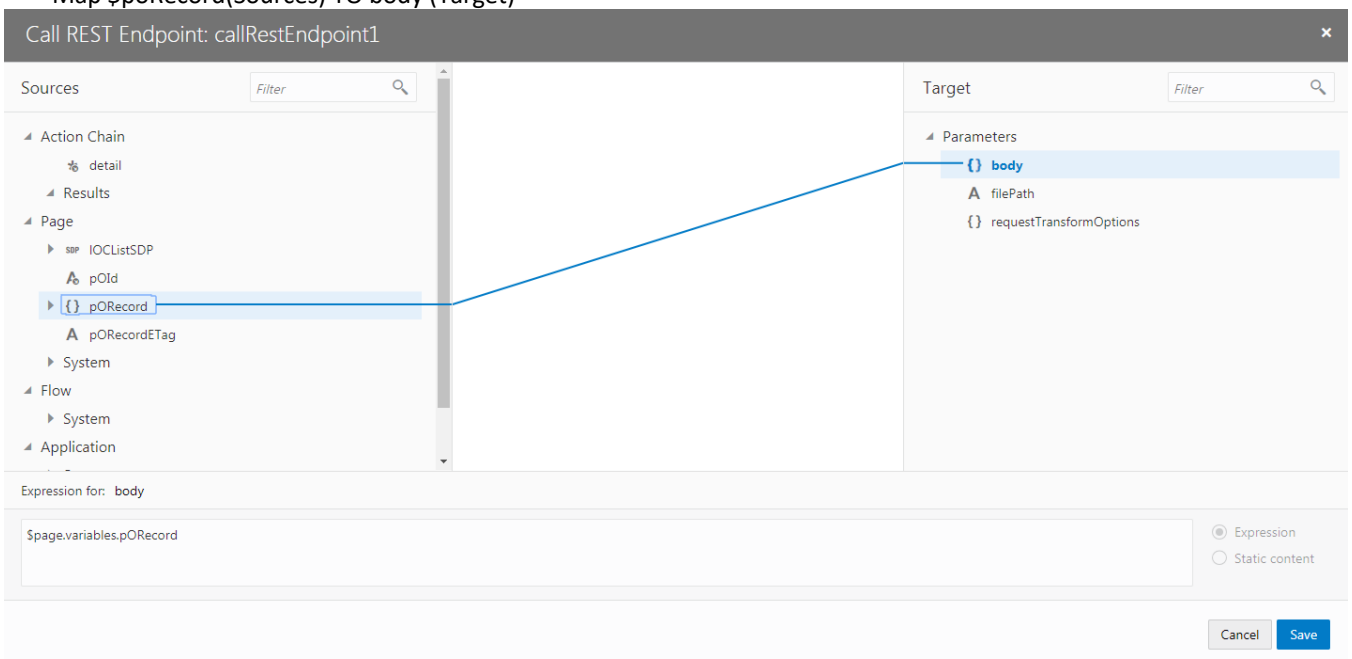
Click on Select. The endpoint is now configured to be invoked from the action chain.

11. Select “Parameters” -> body which opens a mapper interface page



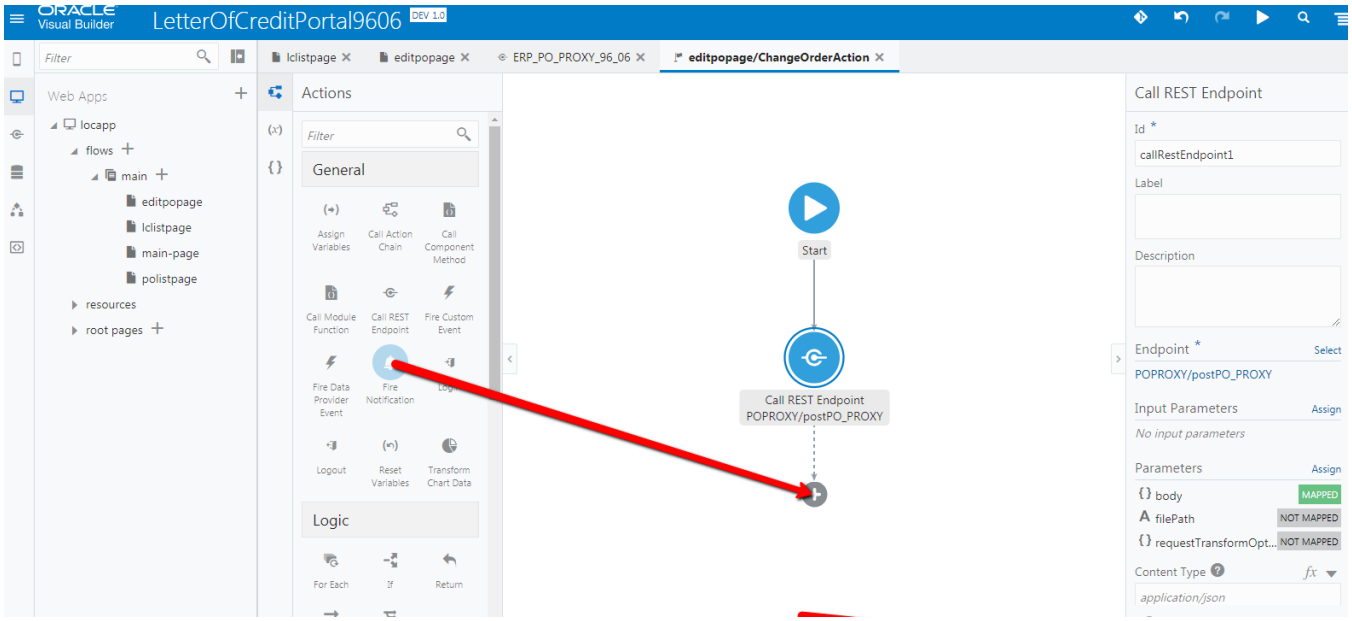
12. We want to Map the “editpopage” page variables to the endpoint interface.

Map $poRecord(Sources) TO body (Target)

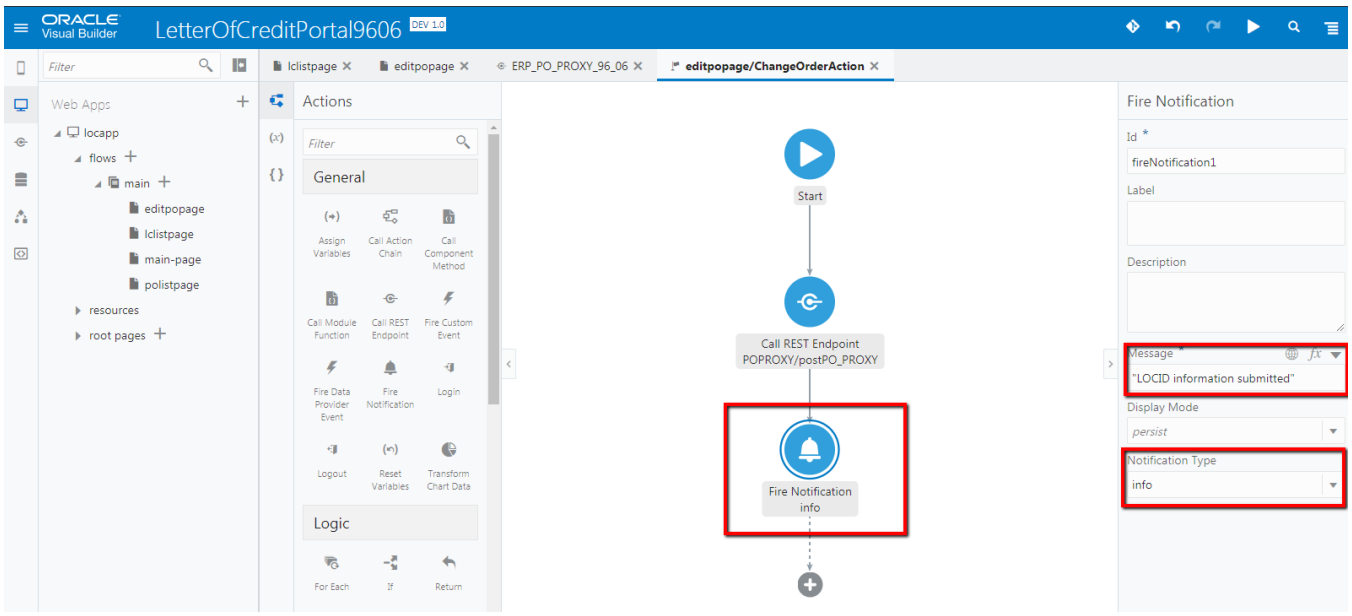


An expression is generated in the expression window based on the mapping. poRecord is a page variable which holds the data from the “editpopage”. Click on Save. You should see the body parameter now marked as “MAPPED”

13. From the Action palette Select “Fire Notification” action on to the “+” sign next to the “Call Rest Endpoint” Action

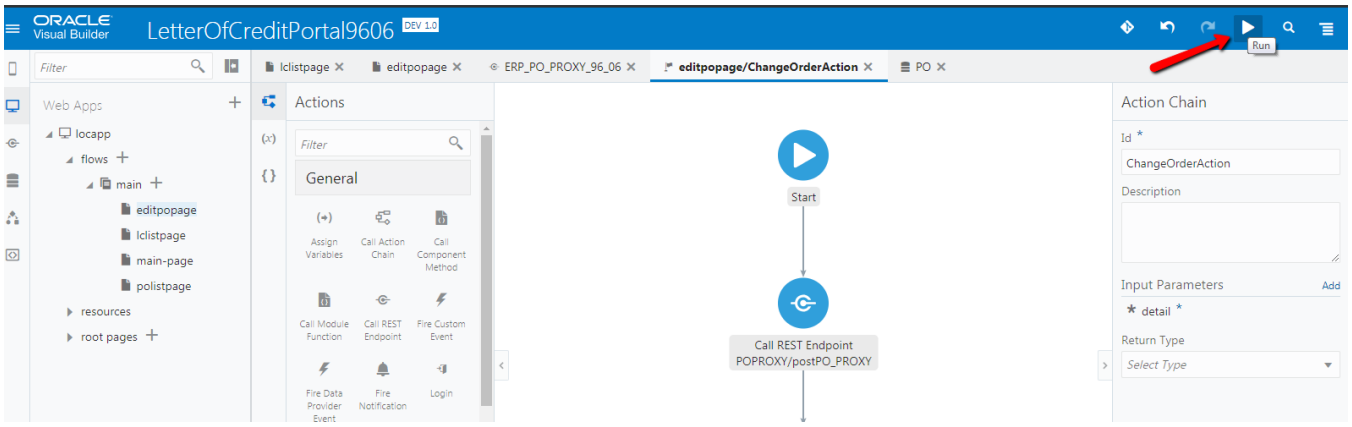


14. Change the Notification type -> info and provide a Message in the text area



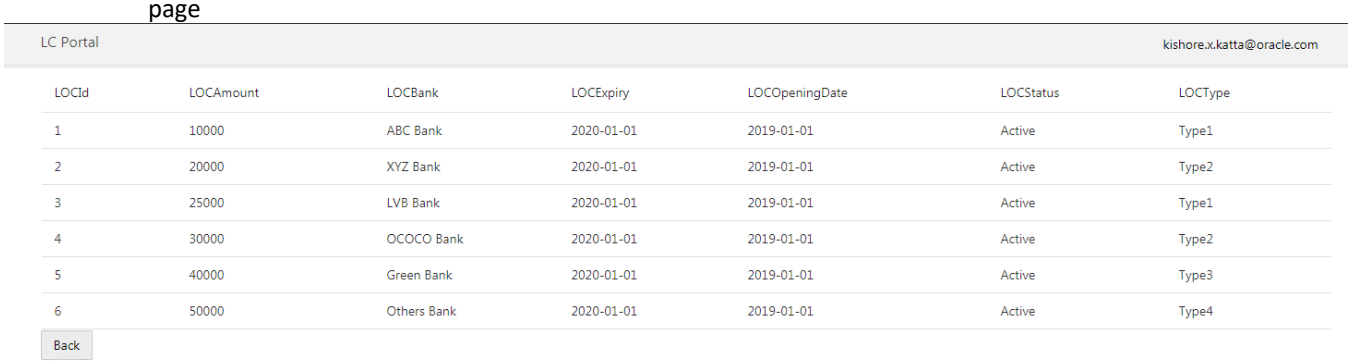
Running the VBCS Web App

1. Click on Run

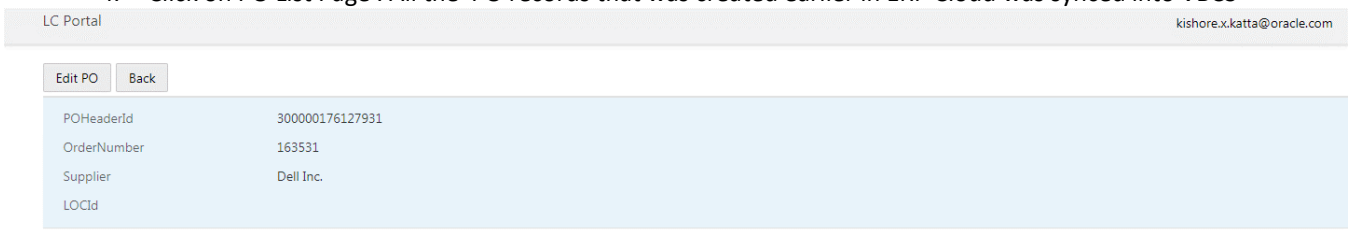


2. The Web application opens up in a separate browser window. We have given a basic web app for you to test the end to end flow

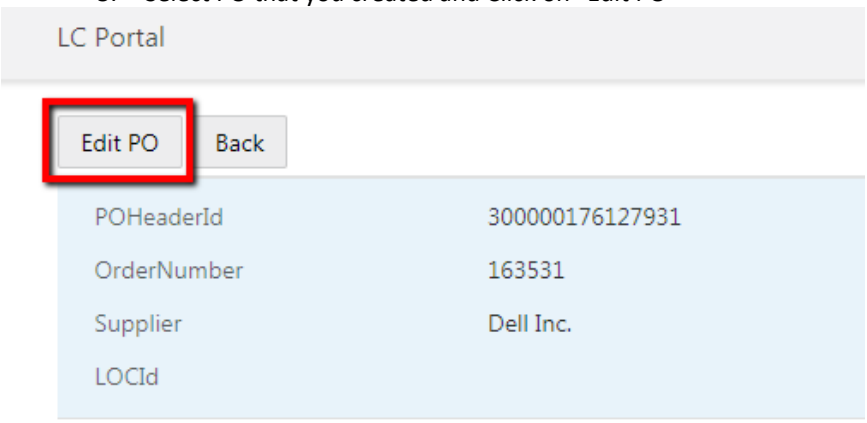
3. Click on LC List Page which displays all the Letter of Credits Available in a Custom table. Go back to the main page



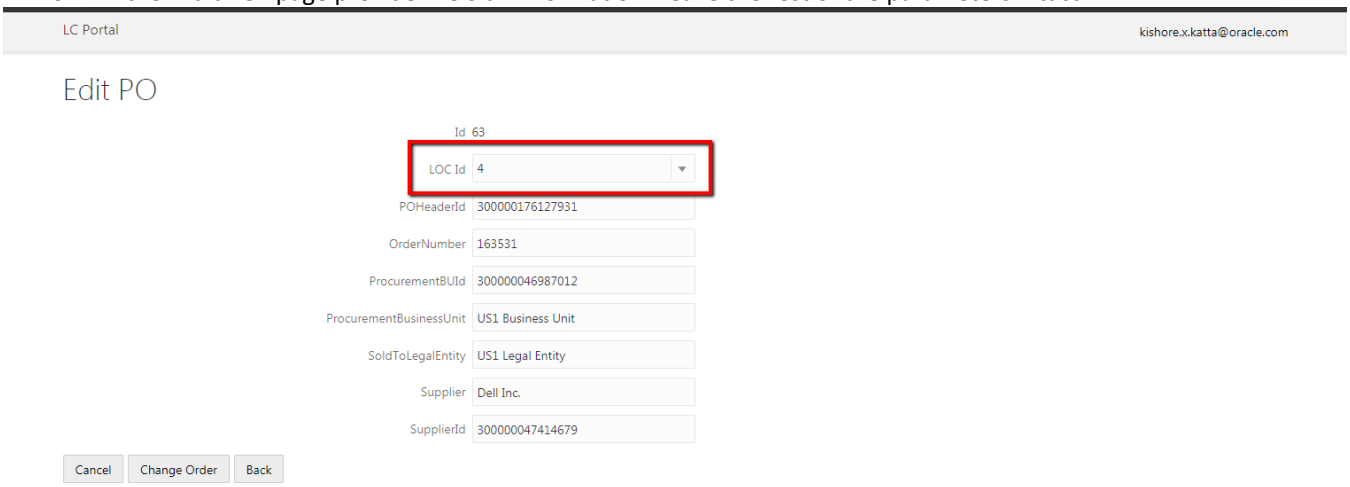
4. Click on PO List Page . All the PO records that was created earlier in ERP Cloud was synced into VBCS



5. Select PO that you created and Click on “Edit PO”

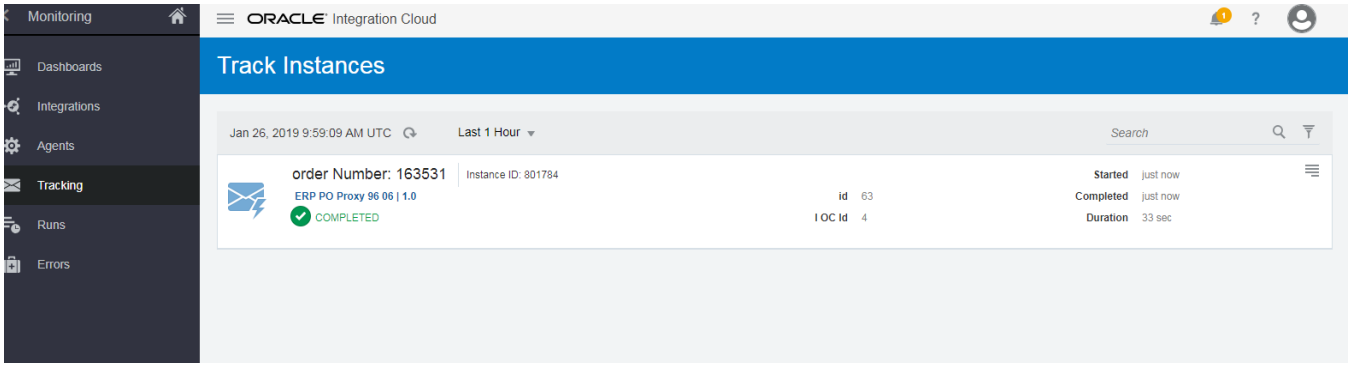


6. In the “Edit PO” page provide “LOCId” information. Leave the rest of the parameters intact

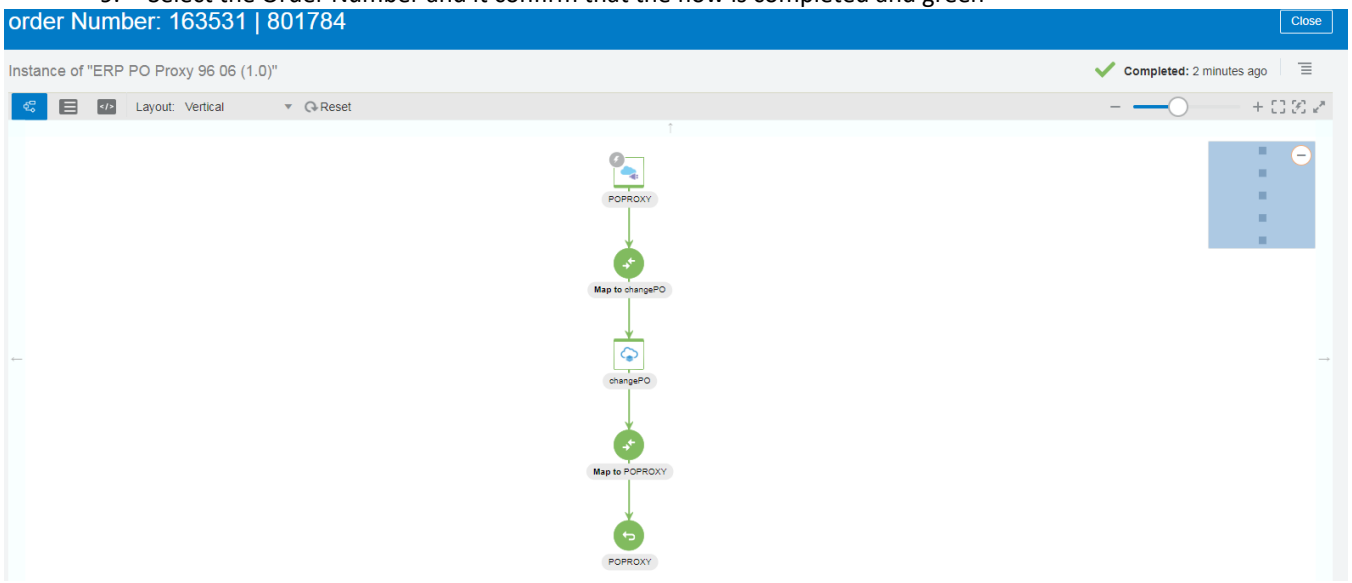


7. Click on “Change Order” button. Which invokes your “ERP PO Proxy <ClassId> <StudentId>” Integration flow

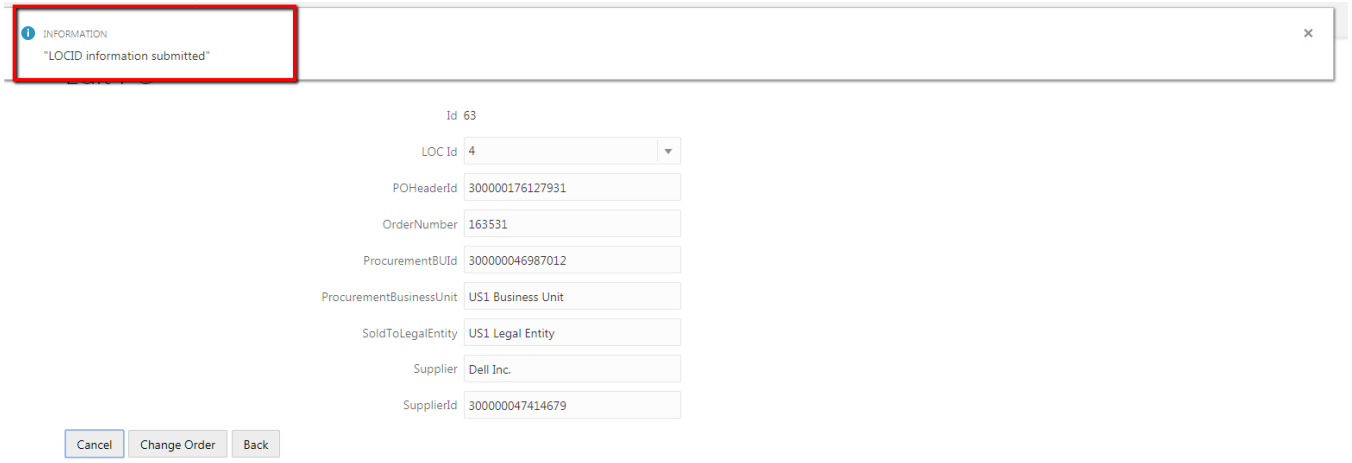
8. You should see an instance is created. Go to Integrations -> Monitoring -> Tracking



9. Select the Order Number and it confirm that the flow is completed and green

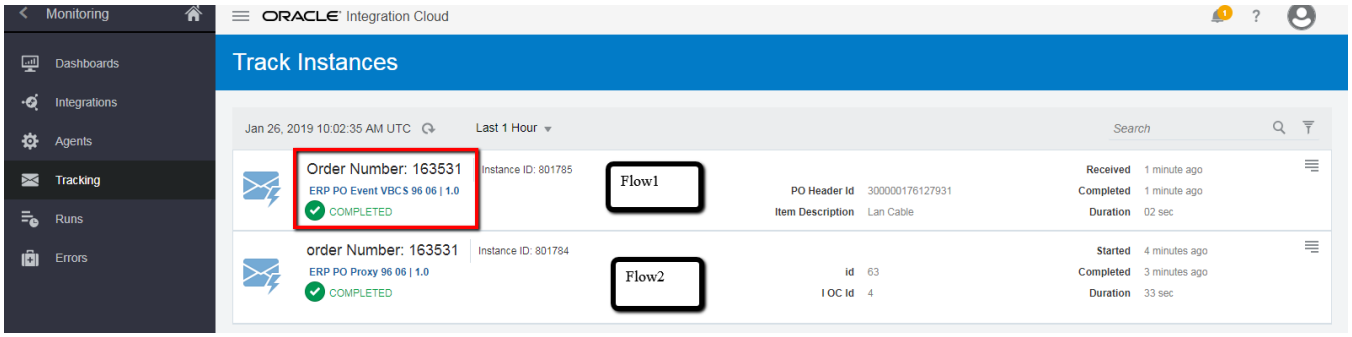


10. Also, observe a notification created in the "Edit PO Page". Confirming the payload is submitted to the Proxy Integration flow

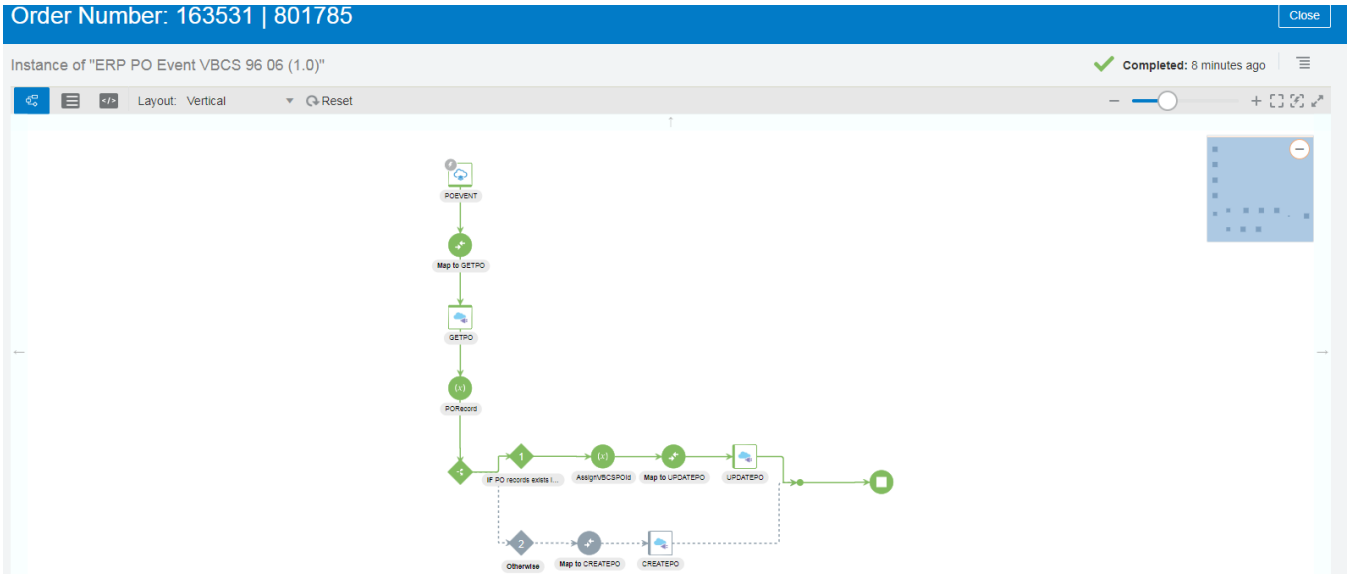


11. In the Integrations -> Monitoring -> Tracking page, you can observe another instance got created. As, LOCId is got updated in ERP Cloud Flow 1 is triggered again.

Note: Purchase Order Event is raised both for Create and Update records

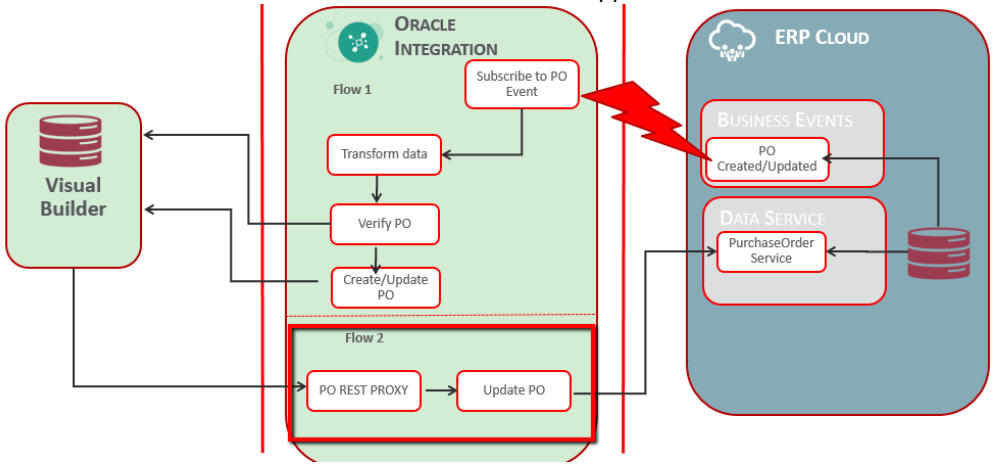


Open the Instance and we see that “If” path is evaluated to Update the PO into VBCS



12. Now go back to the PO List page. It should now show the “LOCId” updated.

Congratulations, you have now completed Flow 2 and an end-to-end Flow to capture PO Events and update with cross reference of Letter of Credit Identifier from VBCS Web app.



Integrating Your ERP with Oracle Integration